# A STUDY ON THE BOND MARKET AND THE IMPLIED FINANCIAL CRISIS OF CHINA

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# ABSTRACT

The bond market of China began to develop in 1981. It plays an important role in China's economy since the government regards bond issuance as a part of its fiscal and monetary policies. There are many types of bonds in China including treasury bonds, fiscal bonds, state construction bonds, key state construction bonds, special government bonds, indexed bonds, national investment bonds, key enterprise bonds, capital construction bonds, financial institution bonds and corporate bonds. The Ministry of Finance is the largest bond issuer in China.

Although both the primary market and the secondary market developed very fast in recent years, the market is still not a very healthy one. One main problem is the illiquidity of the secondary market. The causes behind include the inappropriate practices of the primary market and the under-developed market infrastructure of the money market.

Besides domestic market, Chinese borrowers also participate in the international bond market. Although the amount of foreign debt of China is increasing, the situation is still manageable. Various evidences show that the Mexico-type financial crisis is not likely to occur in China. For foreign investor, China's international bonds should be a good choice in short term compared with those of the other developing countries. However, for a longer investment profile, some other factors need to be considered.

# TABLE OF CONTENTS

# LIST OF ABBREVIATIONS

| | |
|---|---|
| ABC | Agricultural Bank of China |
| BOC | Bank of China |
| BOCOM | Bank of Communications |
| CD | Certificate of Deposit |
| CITIC | China International Trust and Investment Corporation |
| CSRC | China Security Regulatory Commission |
| FDI | Foreign Direct Investment |
| ICBC | Industrial and Commercial Bank of China |
| MOF | Ministry of Finance |
| NETS | National Electronic Trading System |
| NBFI | Nonbank Financial Institution |
| OTC | Over-the-Counter |
| PBC | People's Bank of China |
| PCBC | People's Construction Bank of China[1] |
| RMB | Renminbi or yuan |
| SCSC | State Council Securities Policy Committee |
| SEEC | Securities Exchange Executive Council |
| SHSE | Shanghai Securities Exchange |
| SOEs | State-Owned Enterprises |
| SOUs | State-Owned Units |
| SPC | State Planning Commission |
| STAQS | Securities Trading Automated Quotations System |
| SZSE | Shenzhen Stock Exchange |
| T BILL | Treasury Bill |
| T BOND | Treasury Bond |
| YTM | Yield to Maturity |

[1] The name was changed to Construction Bank of China in 1996.

## List of Figures



## List of Tables in Text



## List of Appendix Tables

# ACKNOWLEDGMENTS

First of all, we would like to give our heart-felt gratitude to Mr. Denis Wang. He has helped us to narrow down our research topic that is both interesting and meaningful. With his abundant experience and knowledge in China, Mr. Wang has given us insight on related issues and helped us all the way through the research.

Besides, we would like to take this opportunity to thank Professor Leslie Young. He has provided us important information and materials of the bond market in China. With his help, our project becomes more comprehensive and the content becomes more updated.

# CHAPTER I

# INTRODUCTION

## Background

The People's Republic of China embarked on its current course of economic reforms in 1979, starting with the rural sector in which a family-based contractual farming system was introduced in place of the commune system. Since then, successful reforms have been carried out in all sectors of the economy. By October 1992, China had made significant progress in its transition from a centrally-planned and closed economy to a market-oriented system, and at that date the government officially endorsed the market economy model. Over the past decade China has averaged an annual growth rate of almost 10% in real GNP, and has become one of the most dynamic economies in the world.

To fund such a high rate of growth, the government's fiscal spending has been increasing steadily over the period. However, as the economic decentralization process has progressed, the absence of an appropriate taxation system and accounting rules have severely eroded the government's revenue base. Consequently in 1981, the government elected to cover part of its budgetary shortfall through government bond issuance, instead of relying on overdrafts from the single-bank system. Initially used only as a last resort, debt issuance has since been accepted, albeit gradually, as an important non-inflationary method of financing government expenditures.

## Objective

The purpose of this project is to study the emerging bond market of China. Specifically, it attempts to answer the following questions:

- What is the developing process of the China's bond market?
- What is the roles and functions of the bond market in China?
- How many debt securities are available in China?
- What is the current situation of the domestic and international bond markets of China?
- Is 'Mexico-type' financial crisis likely to occur in China?
- Is China's international bond a good investment tool for foreign investor?

## Methodology

This thesis is constructed mainly by extensive literature review and our own analysis. During the research period, we searched for related materials in the libraries of various universities which include the Chinese University of Hong Kong, the City University of Hong Kong, the Hong Kong Polytechnic University and the Hong Kong University of Science and Technology. Following is the main sources of the relevant information:

- Books
- Reports
- Academic Journals
- Periodicals
- Newspapers
- Publications on statistical data

Although we have contacted Peregrine Fixed Income Co. Ltd. and Jardine Fleming Co. Ltd. for relevant information, the former does not has such kind of information and the latter did not make any response. However, we got plenty of mainland's newspaper cuttings from the relevant department of the Hong Kong and Shanghai Bank Corporation. Together with the daily searching of Ming Pao Daily News and Asian Wall Street Journal, we hope that this paper would be a complete, informative and up-to-date version of study on the current bond market of China.

# CHAPTER II

# HISTORY OF THE BOND MARKET IN CHINA

## History of the Government's Debt Issuance

Before 1949, there were government bonds issued by the Nationalist government. After the PRC was established, the central government issued various kinds of bonds between 1950 and 1959. For example, 'Victory Bonds' in 1950 and 'Construction Bonds' in 1954 and 1958.[1] After 1959, bond issuance stopped. During the Cultural Revolution, 'China has neither internal debts nor external debts' was a hot propaganda slogan.[2] Chinese government resumed issuing bonds in 1981 because of the high budget deficits in the beginning of 1980s. Thereafter government bonds were issued every year and nowadays government bond is already the largest item in the financial securities market in China both in terms of quantity issued and trading volume.

Starting from a 15% level in 1981, debt issuance covered more than 45% of the budget deficit by 1987, and in 1994, it has entirely financed the deficit. Correspondingly, the size of government bond issuance has grown from RMB 4.9 billion in 1981 to RMB 100 billion in 1994. Yet when compared with developed countries, China's domestic debt burden is quite modest. At the end of 1993, total outstanding government debt was estimated to be around 55 percent of China's GNP for that year. Combined with a phenomenal savings rate of close to 40% of GDP, the potential for growth in debt issuance is enormous. Today, as China faces an acute

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[1] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992, p.88.

[2] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.259.

shortage of capital to fund infrastructure development and stimulate further growth, bond issuance will invariable become more and more important.[3]

Starting from 1981, debt issuance has been increasing, from about 4 billion per year between 1981 to 1984 to 6 billion per year in 1985 and 1986. The issuance increased to 16 billion in 1987, 25 billions in 1988, 27.5 billion in 1989, 38 billions in 1992, 37 billions in 1993 and 115 billions in 1994. The debt issuance for 1995 was around 154 billions. The following table shows the ratio of debt issuance to government expenditure between 1985 and 1995.

**Table II-1: The Ratio of Government Expenditure to Debt Issuance**

| Year | Total Government Expenditure (Y billion) | Debt Issuance (Y billion) | Debt/ Expenditure Ratio |
|---|---|---|---|
| 1985 | 184.48 | 8.99 | 4.9% |
| 1986 | 233.08 | 13.83 | 5.9% |
| 1987 | 244.85 | 16.96 | 6.9% |
| 1988 | 270.66 | 27.08 | 10.0% |
| 1989 | 304.02 | 28.30 | 9.3% |
| 1990 | 345.22 | 37.55 | 10.9% |
| 1991 | 381.36 | 46.14 | 12.1% |
| 1992 | 438.97 | 66.97 | 15.3% |
| 1993 | 528.77 | 69.02 | 13.1% |
| 1994 | 581.98 | 117.52 | 20.2% |
| 1995 | 635.92 | 153.74 | 24.2% |

Remark : Data for 1995 are estimation
Source : Statistical Year Book of China, 1995

From the table, we see that the government Debt/Expenditure ratio is not very high. However, since local government is not allowed to raise debt, all the debt issuance shown in the table are from the central government. Therefore, the Debt/Expenditure of the Central Government is very high and it amounted to 39.37% in 1994 and 34.21% in 1995.

The following graph visualizes the amount (in Yuan) of debt issuance by China government in the past ten years.

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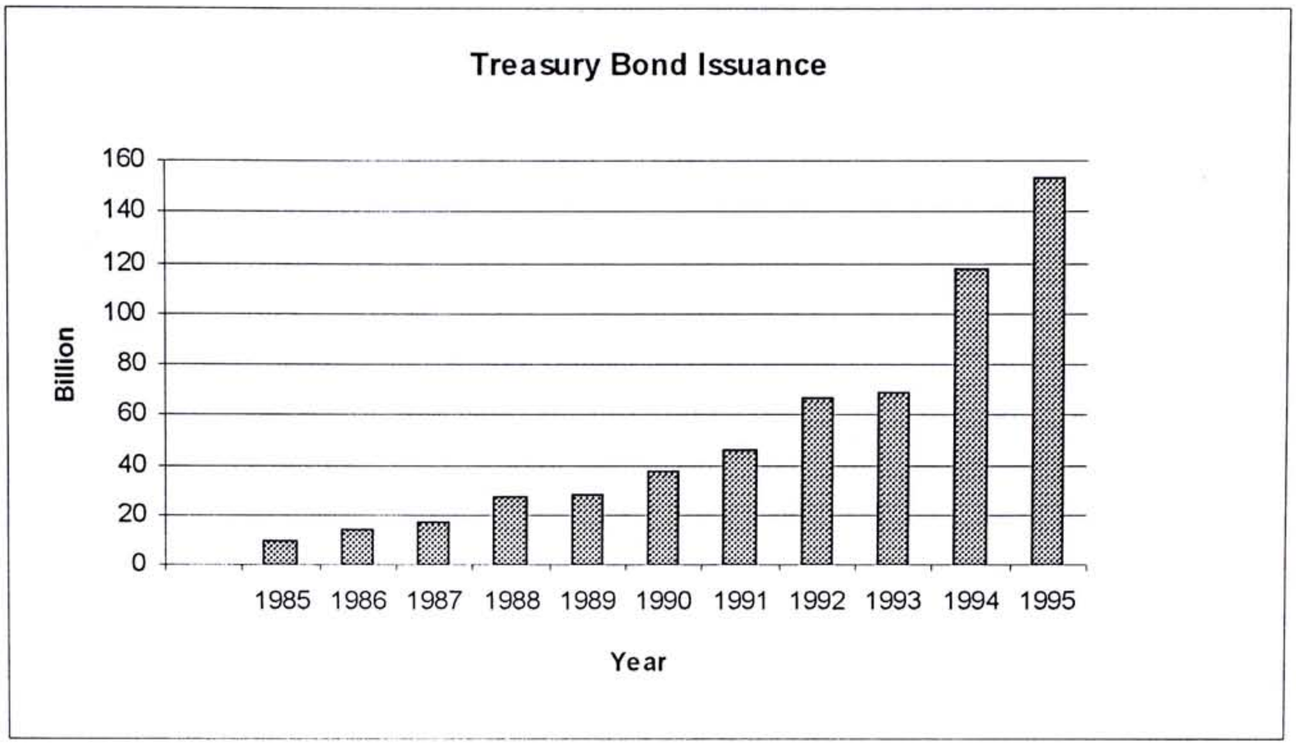
[3] "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p.116.

**Figure II-1: China's Treasury Bond Issues**




## Reasons for the Rapidly Increasing Debt Outstanding

There are several reasons which account for the rapid increase in the debt outstanding of the government.[4] These include:

- The need to cover for the increasing government deficit.
- Before 1993, two-third of the government deficit were subsidized by the central bank (The People's Bank of China). However, the subsidization of the deficit by over-drafting from the central bank has increased the difficulty of inflation control by the government. So, the Budget Law was enacted in 1994 to prohibit the government from borrowing from the PBC to finance fiscal deficits. Since then, such deficits have been covered solely through treasury bond issuance.
- 90's is the peak period for the repayment of the debt issued and this has accounted for a large percentage of the government expenditure. In 1994, the revenue through debt issuance was 117.52 billion, in which 49.82 billion was used to repay

[4] Liu, Pei-Qiong. Zhong Guo Jing Ji Da Qu Shi 1996. Commercial Press, 1996, pp. 230-231.

the due debt. In 1995, the debt repayment was around 86.02 billion, 36.2 billion more than the previous year. Thus, the only way to fulfill the debt payment is the rolling-over of debt through debt issuance. However, like the rolling of a snowball, the debt liabilities of the country would become larger and larger.

## Recent Development of the Bond Market in China

The following table compared the size of the emerging East Asian bond market between 1990-1994. The market size of China's bond market is comparable to the other emerging markets in Asia. However, the market size is insignificant when compared with the other well-developed bond markets, such as Japan.

**Table II-2: A Comparison of the Emerging and Well-Developed Bond Markets in the World**

| Country | 1990 | % GDP | 1992 | % GDP | 1993 | % GDP | 1994 | % GDP |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| **China** | **23.6** | **6.7** | **40.4** | **9.6** | **47.4** | **11.1** | **33.3** | **6.5** |
| Hong Kong | 1.0 | 1.3 | 3.0 | 3.1 | 6.0 | 5.5 | 11.5 | 8.7 |
| Indonesia | 1.7 | 1.6 | 11.4 | 8.9 | 13.3 | 9.2 | 9.1 | 5.8 |
| Korea | 88.2 | 34.8 | 121.5 | 39.5 | 138.1 | 41.7 | 161.0 | 42.8 |
| Malaysia | 27.1 | 63.3 | 32.0 | 55.2 | 35.1 | 54.5 | 39.5 | 56 |
| Philippines | 8.7 | 19.6 | 20.5 | 38.7 | 23.7 | 43.5 | 25.1 | 39.3 |
| Singapoore | 24.8 | 68.1 | 37.4 | 77.1 | 38.4 | 69.6 | 44.9 | 72.4 |
| Thailand | 8.4 | 9.9 | 8.4 | 7.6 | 10.3 | 8.2 | 13.7 | 9.8 |
| **Total** | **183.6** | **18.4** | **274.6** | **22.5** | **312.3** | **23.8** | **338.0** | **22.3** |
| | | | | | | | | |
| Germany | 1141.0 | 70.0 | 1420.0 | 72.1 | 1587.0 | 83.1 | 1719.0 | 89.5 |
| Japan | 257.0 | 26.4 | 247.0 | 23.6 | 311.0 | 33.0 | 366.0 | 35.1 |
| United Kingdom | 2116.0 | 72.2 | 2487.0 | 67.9 | 2887.0 | 68.5 | 3443.0 | 73.7 |
| United States | 5168.0 | 94.1 | 6389.0 | 107.6 | 699.3 | 111.7 | 7429.0 | 110.2 |

Remark : Figures for industries exclude Eurobonds
Source : The World Bank and Salomon Brothers, Inc.

Recently, the bond market in China has undergone rapid change. The types of bond issued have been increasing. Besides, the method of placement has also changed from mandatory to the allowing of voluntary purchasing. Starting from 1988, in order to try to eliminate black markets, the government has allowed the trading of treasury bond in secondary markets. Moreover, the development of bond derivatives market such as the Shanghai Futures Bond Market has reduced the risk of investing in bond as a result of the fluctuating bond price. All these show the efforts of the government to improve the efficiency of the China bond market as a tool for resource allocation.

The following table summarized the major events that have occurred in the China bond market in the past.

**Table II-3: Chronology for the Events in the China Securities Market**

| Year | Major Events |
|---|---|
| 1981 | First government's bond issue |
| 1988 | The issuance of indexed bond with inflation adjusted interest rate |
| 1988 | Treasury bonds become tradable in secondary market |
| 1990 | The establishment of the Shanghai Securities Exchange (SHSE) |
| 1991 | The establishment of the Shenzhen Securities Exchange (SZSE) |
| 1992 | The development of the Shanghai Bond Futures Exchange |
| 1992 | SHSE launched the first bond futures contract |

The issuing of bonds and stocks to raise funds was first authorized as an experiment in a few cities, namely Shenyang, Shanghai, and the Guangdong province, and was later expanded to Beijing, Chongqing, Xiamen, and other large cities. These areas were chosen because of the need for enterprises in these cities to take the initiative to raise capital. All these areas faced a common problem: they needed to raise a substantial amount of funds to finance infrastructure development necessitated by the rapid increases in investment projects as well as to enhance their investment funding levels during the time that the government was reforming the fund allocation system under which the budgetary allocations of investment funds to enterprises were greatly reduced.[5]

Table II-4 shows the total outstanding financial instruments and their relative importance in the financial markets. As expected, government bonds account for a major share of total securities issued during the period surveyed. At the same time,

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[5] "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p.115.

corporate bonds (by state-owned, collectively owned, and private enterprises) were also major financial instruments in the China's market.[6]

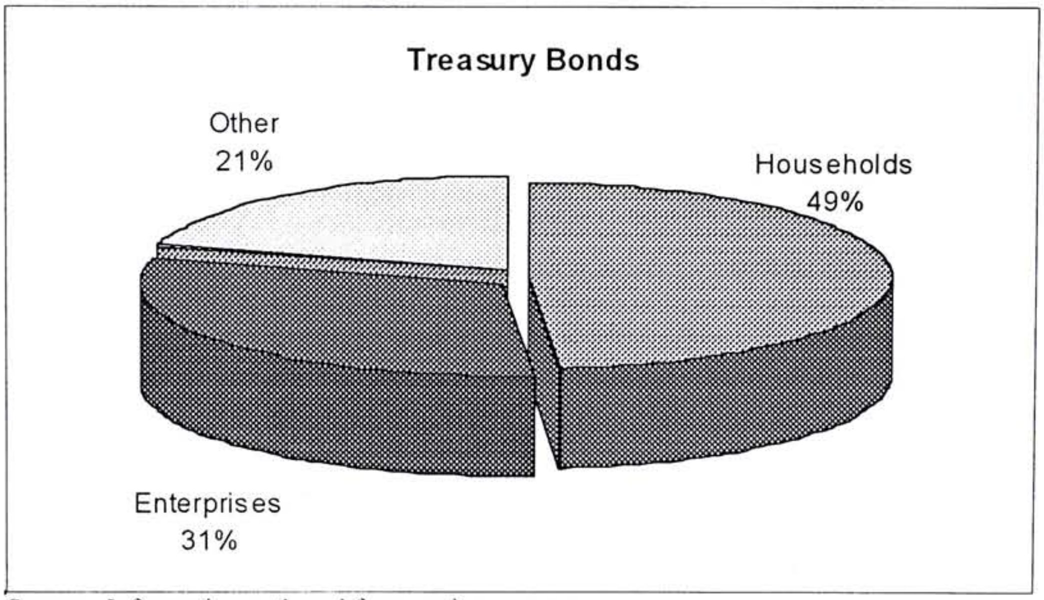
**Table II-4: Total Outstanding of Financial Instruments, 1981-1990 (Y billion)**

| Types | Amount issued | Percent of total | Amount outstanding | Percent of total |
|---|---|---|---|---|
| Government bonds | 57 | 35.7 | 42 | 32.5 |
| Financial bonds | 30 | 18.8 | 25 | 19.4 |
| Construction bonds | 8.6 | 5.4 | 8.6 | 6.7 |
| Corporate bonds | 37.5 | 23.5 | 27 | 20.9 |
| Other bonds | 22 | 13.8 | 22 | 17.0 |
| Stocks | 4.5 | 2.8 | 4.5 | 3.5 |
| Total | 159.6 | 100.0 | 129.1 | 100.0 |

Source: The Re-emerging Securities Market in China

The following figure shows the holders of Government Bonds between 1981-1990.

**Figure II-2: Issues of Government Bonds by Holders, 1981-1990 (in billion of Yuan)**




Source : Information gathered from various sources

We see that households were the main holders of government bonds, accounting for about half of the total bonds issued. Enterprises held about one-third of the same security while banks and non-bank financial institutions took the rest of the holdings. For other government bonds (construction, indexed, and other special government bonds), enterprises and households held roughly the same importance.

[6] "Asian bond market: A US$1 trillion catch by 2004 ?." Executive, July 1995, p.62.

# CHAPTER III

# THE ROLES OF BOND MARKET IN CHINA'S ECONOMY

## The Importance of Government Securities Market for China's Development

The government securities market is important for at least three reasons. First, it is a means of imposing fiscal discipline on the government. To begin, government securities must be sold to the public if the central bank is committed to a policy of not monetizing the deficit. In this case, the willingness of the private sector to absorb government debt is a constraint on fiscal policy. Thus, the primary market for government securities is an important disciplinary force in the move away from a planning structure and towards a modern market economy.

Second, the secondary market in government securities market can provide the whole financial system with a market determined benchmark interest rate. Government securities are a homogeneous financial instrument with risk characteristics that are easy to understand. If secondary market trading is active and the markets are liquid, then the interest rate on government bonds provides a benchmark for all financial transactions. This is particularly important if competition in the determination of bank deposit and loan rates is restricted.

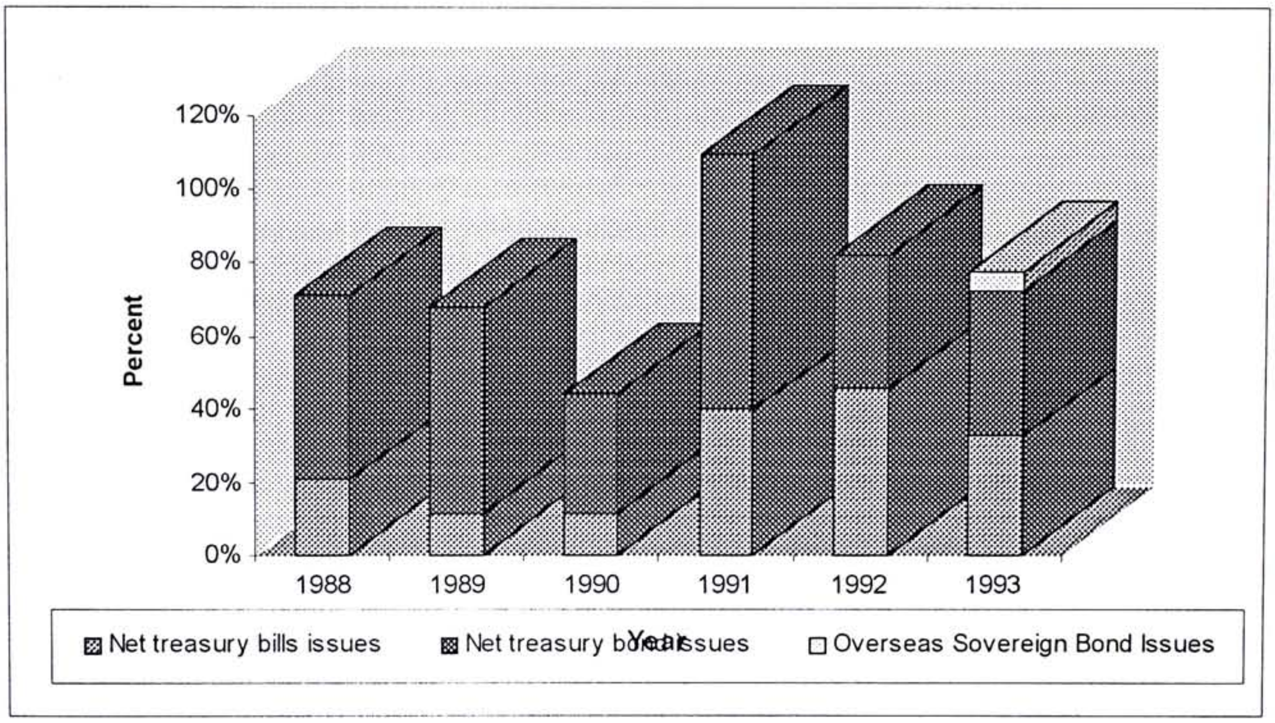
Finally, the existence of a government securities market enables the central bank to broaden the set of monetary policy tools to include open market operations. Although open market operations can be conducted without a deep securities market or with assets other than government securities, a functioning secondary market for government securities facilitates policy operations.

## Fiscal Management

The role of capital market in China's financial sector is small relative to the banking system, but has been growing. Total assets of non-monetary financial institutions grew from 6 percent in 1989 to a high of 8 percent in 1992, of the financial sector's assets, declining once again to 5 percent by 1994.

The following figure shows the contribution of various bond issues to cover for the central government budgetary deficit.

**Figure III-1: The Contribution of Bond Issues to the Government's Budgetary Deficit**



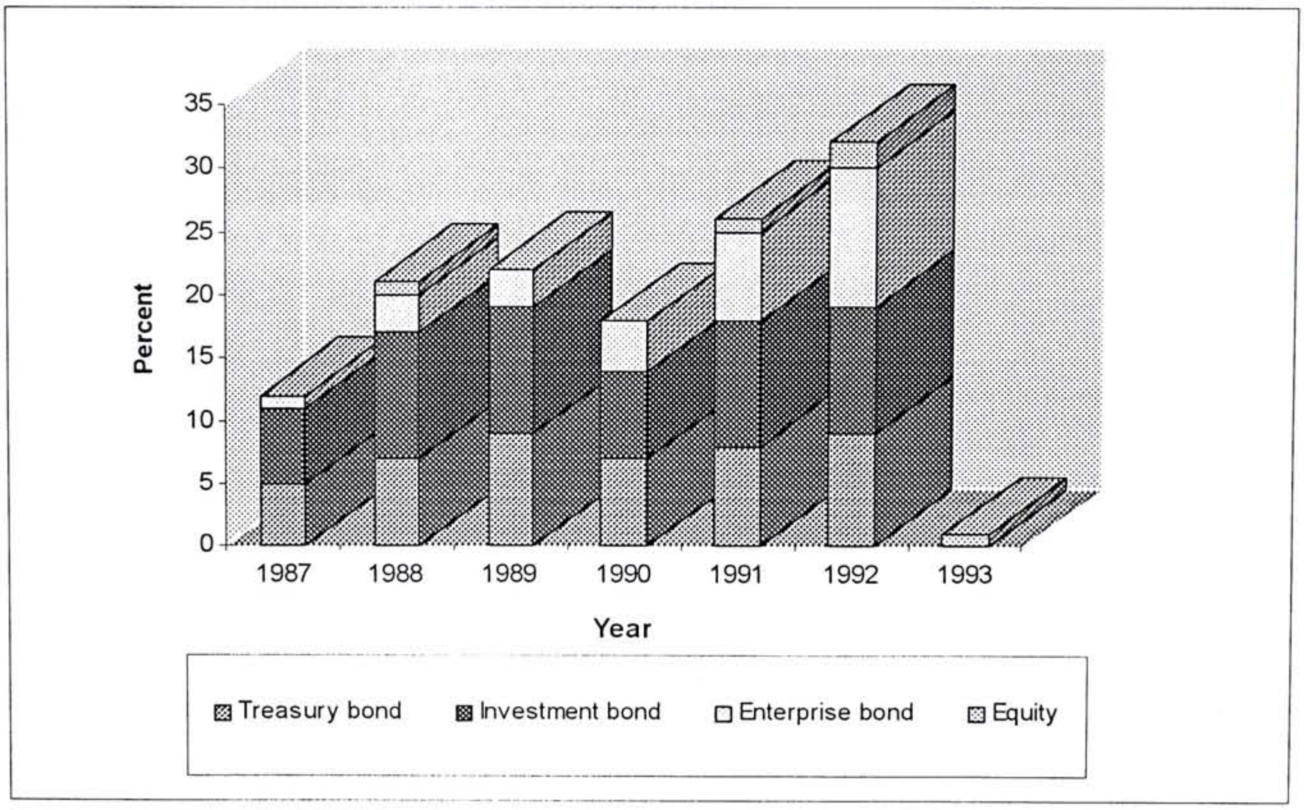

Sixty percent of PBC lending to the banking sector is estimated to cover the financing of 'policy loans', the (consolidated) deficit increases, and the size of annual treasury bond issues compared to the (consolidated) deficit increases, and the size of annual treasury bond issues compared to the (consolidated) deficit consequently falls. The annual volume of net treasury bonds issued over 1989 to 1993 has varied between 11 and 23 percent of the consolidated deficit, while the annual volume of treasury bills alone has varied between 5 and 23 percent of the consolidated deficit. If quasi-fiscal operations are 'fiscalized', an increase in the scale of bond issues is likely to be required.

Recently, the government has increased the amount of bond issues to cover for the government budget. In 1993, the government has issued about US$600 million sovereign bond and US$1.6 billion in 1994. If these are added to the measures of the relative size of government bond issues and the budget deficit, the role of securities markets increases; to around 38 percent in 1993 (33 percent from domestic bond issues, and another 5 percent from overseas issues).[7]

## Bond Financing of Real Sector Investment

The contributions of securities markets in general, to the investment need of the real sectors of the economy, has been small. The following figure shows the contribution of capital markets to real sector investment.

**Figure III-2: The Contribution of Bond and Securities Markets to the Real Sector's Investment**




[7] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.3.

From the figure, the total contribution of bonds to SOU investment ranged from 8% to 21%. After 1993, there was a clampdown on the issue of new corporate debt, which would have led to a reduction in this percentage.

In terms of aggregate contributions of foreign resource inflows into China, international securities issues still account for a small share of China's total external debt. The bulk of foreign capital inflows into China have taken the form of foreign direct investment. Portfolio equity only constituted 5.5% of aggregate net resource flows to China in 1993, and bonds accounted for only 2.7% of new borrowing commitments in 1993.

However, the contribution of capital markets to resource inflows to the real sectors of the economy is embedded within the mechanisms of the investment and credit plans. Thus, the extent to which the capital markets contribute is largely determined by the extent to which the government permits them to contribute, and the issuers of securities are determined by the distribution of quotas for each of these heads by the central and regional offices of SPC, PBC and SAEC.[8]

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[8] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.3.

# CHAPTER IV

# TYPES OF DEBT SECURITIES IN CHINA

## Government Bonds

### Treasury Bonds

Treasury bonds were first issued in 1981 by the Minister of Finance (MOF) for financing the state budget. The PBC is responsible for the management of the treasury bonds. Specialized banks and other financial institutions are then entrusted by the PBC to handle transactions of treasury bonds. The interest of treasury bonds is calculated based on simple rate.

Between 1981 and 1984, the treasury bonds issued had the same scheme of maturity which was within the range of 5 to 10 years. Ironically, the maturity of individual issuance was determined by random drawing, this reflected that the Chinese government lacked a comprehensive financial planning at that time. The MOF started to pay back the principle plus interest in the sixth year after issuance. Each year 20 percent of the holders were repaid. It means the last 20 percent were redeemed in the tenth year. The interest rates of the bonds issued in that period were 4 percent and 8 percent for institutional holders and individual holders respectively.[9]

From 1985 to 1987, the treasury bonds issued had a uniform maturity of 5 years. It was shortened to 3 years after 1988. The interest rates were 5 percent for institutions and 9 percent for individuals in 1985, 6 percent and 10 percent for the period of 1986 to 1988. Then, started from 1989, the interest rates for institutions and individuals were unified. A uniform rate of 14 percent was offered in 1989 and 1990. In 1991, the interest rate was declined to 10 percent and the volume of issuance had

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[9] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.260.

doubled compared with 1990. Then from 1992, the number of issuance was not confined to once each year. There were two issuances of treasury bonds both in 1992 and 1993. It was further increased to 4 issuances in 1994. Furthermore the maturity of the treasury bonds in 1994 was more various, ranged from 6 months to 3 years.

Within the period from 1981 to 1994, the total amount of treasury bonds issued was around 242 billion yuan.[10] Table IX-1 summarizes the treasury bonds issued from 1981 to 1994.

In 1995, China issued roughly 154 billion yuan worth of treasury bonds which was about 4 percent of the GDP of the same year. That year, Chinese government repaid 87 billion yuan outstanding treasury bonds.[11]

The issuance of treasury bonds continues in 1996. In January and February, the MOF already issued 13.5 billion yuan and 21 billion yuan of discount bonds respectively.[12] In April, 10 billion yuan discounted certificate bonds was issued also.[13] Besides, China will issue a record 195.26 billion yuan in government treasury bonds in 1996. Most of the planned issue will cover repayment of 133.17 billion yuan in principal and interest on outstanding government bonds that fall due this year, while 61.44 billion yuan will cover the deficit in the central government budget for 1996. The remaining 646 million yuan from the planned bond issue will be used to repay foreign loans on major construction projects.[14]

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[10] Zhang, Yi-Chen, and Yu, Da. "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p.116.

[11] Blass, Anthony. "China's Fledgling Bond Market." China Banking & Finance, 1 November 1995, p.2.

[12] Hastings, Kirsti. "China to Launch Debt-Market Reform." Asian Wall Street Journal, 9 February 1996.

[13] Dow Jones. "China Bond Issue." Asian Wall Street Journal, 28 March 1996.

[14] Flint, Robert. "China Plans to Issue $23.57 Billion in Treasury Bonds in '96, a Record." Asian Wall Street Journal.

At the beginning, trading of treasury bonds was not allowed. However, secondary market was created and trading of treasury bonds was legalized in the second half of the 1980s. In April of 1988, with State Council approval treasury bonds held by individuals became negotiable. Trading was initially permitted experimentally in seven cities, but only for those issued in 1985 and 1986. Then in June 1988, the trading network was extended to 63 cities.[15]

### Fiscal Bonds

Fiscal bonds was created in 1988 for financing budget deficit.[16] This type of bond was issued by MOF and managed by PBC. They were allocated to banks and other financial institutions by mandatory method. Their maturity ranged from 2 to 5 years. Although they were not tradable, they could be pledged. The amount issued in the first year was 6.6 billion yuan. By the end of 1990, totally 13.716 billion yuan worth of fiscal bonds were issued.[17] The 1988 issue matured in 1991 but nevertheless have not been redeemed. It is regarded as a permanent loan by the MOF. Starting from 1994, no fiscal bond was issued, that showed MOF's intention to terminate this species of bond.

### State Construction Bonds

It was a special security issued first in 1988 by MOF to public, financial institutions and enterprises for financing SOEs and infrastructure. The first issue was

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[15] World Bank. China Financial Sector Policies and Institutional Development. Washington, D.C.: World Bank Publication, 1990, p.106.

[16] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992, p.89.

[17] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, pp.260-261.

3.065 billion yuan in amount.[18] Besides, the State Construction Bonds were tradable and for individual holders they were income tax exempt.

### Key State Construction Bonds

It was issued between 1981 and 1987 by the MOF through the People's Construction Bank of China for financing key state construction projects. In 1987, 5.5 billion yuan worth of key state construction bonds were issued.[19]

### Special Government Bonds

The MOF created special government bonds in 1989. Their creation aimed at distinguishing treasury bills issued to individuals and those issued to institutions. The first issue was worth 4.3 billion yuan and the bonds were assigned to profitable SOEs, collectively owned enterprises, private enterprises, pension funds, insurance companies, etc. The yield of the first issue was 15 percent and the maturity was 5 years. In 1990, totally 3.24 billion yuan worth of special government bonds were issued.[20] They were not tradable but were interest-tax exemptable. Finally, the Special Government Bonds merged with fiscal bonds in 1992.

### Indexed Bonds

In order to curb inflation and to reduce demand in the economy, the MOF invented indexed bonds in 1989. The bonds were issued to urban and rural residents, private companies, insurance companies and various fund foundations. The term of maturity of the bonds was 3 years. The yield of the bond was equal to the floating rate

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[18] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992, p.89.
[19] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992. p.89.
[20] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.261.

of three-year time deposit announced by the PBC plus the value-guarantee subsidy[21] and an additional one percentage point. Specialized banks and post offices around the country were responsible for promoting the bonds. A sales target was assigned to each province and the local governments needed to buy the remaining bonds by using local funds in case they could not meet the sales quota. Similar bonds were also issued in 1992[22], 1994 and 1995.

### National Investment Bonds

With the approval of SPC, provincial governments started to issue national investment bonds in 1991. The fund raised was used to finance regional development.

### State Investment Corporation Bonds

These bonds are formally issued by SOEs or governmental agencies[23] and thus carry a semi-official property. They were used to supplement general revenues of enterprises and supplement their budgetary financial support.

### Key Enterprise Bonds

It was first issued in 1987 by SOEs in electrical, metallurgical, nonferrous and petrochemical industries to client enterprises mandatorily. They were guaranteed by the state government and serviced by PCBC. They could be pledged. The maturity ranged from 3 to 15 years. In 1987 and 1988, 3 billion yuan and 1 billion yuan worth of key enterprise bonds were issued respectively.[24]

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[21] Value-guarantee subsidy was an indexing scheme linked to inflation rate.
[22] With maturity of 3 years and 5 years.
[23] Or by MOF on their behalf.
[24] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992, p.89.

## Capital Construction Bonds

Eight billion yuan worth of capital construction bonds were first issued in 1988 by the State Energy Investment Corporation, the State Transport Investment Corporation and the State Transit Railway. The bonds were administrated by PCBC and were primarily distributed to specialized banks at an annual rate of 7.5 percent with a maturity of 5 years. By the end of 1990, the amount of issuance was 9.5 billion yuan.[25]

## Financial Institution Bonds

Being self-explained, these bonds are issued by financial institutions. As a result of the nation-wide financial reforms, the distribution of funds between the Central Bank and the various specialized banks was changed that their relationships became lending-borrowing one. To supplement their loanable funds, specialized banks can attract more deposits, borrow from the central bank or issue financial instruments such as CDs and bonds. For non-bank financial institutions such as trust and investment companies, they are also allowed to issue bonds to finance their special investment projects. Usually, the approved projects are large infrastructure projects or projects involved advanced technology and foreign capital.

In 1985, the Agricultural Bank of China issued 1.5 billion yuan worth of bank bonds with the same yield as treasury bonds[26] Two years later, The Industrial and Commercial Bank of China offered one billion yuan worth bonds to the public with the same interest rate. Until 1988, state-owned banks have issued a total of 8.5 billion yuan worth of bank bonds. The amount was increased to around 33 billion yuan by the

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[25] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.261.
[26] The yield of the treasury bonds in 1985 was 9 percent.

end of 1991.[27] In July 1993, PBC issued 20 billion yuan worth of bonds with maturity of 3, 6 and 9 months. The bonds were placed through inter-bank centers to redistribute bank excess reserves. The proceeds was utilized to lend to banks and NBFIs in regions where reserves were not enough.[28]

Unlike treasury bonds, financial institution bonds pay annual interest. They are tradable and usually with a maturity of one to five years.

## Corporate Bonds

Corporate bonds were first issued in 1982. These bonds became popular fund raising apparatus in 1985, particularly among rural enterprises because at that time the Beijing government tightened the strategy of making bank loans to rural factories to cool the overheated economy. As a result of the financial reforms in China, investment funds to enterprises from budgetary allocations were significantly reduced. Moreover, many newly established small-scale enterprises not even eligible for such allocation from the government. Therefore enterprises needed to raise funds by their own and so they issued bonds to the public. Usually, corporate bonds offer coupon rates which doubled those offered by banks. This makes corporate bonds a very attractive investment tool and thus many people withdrew their bank deposits and put them into the corporate bond market.

By the end of 1988, a total of 14 billion yuan worth of corporate bonds was issued. The figure bloomed to about 16.5 billion yuan by the end of 1991.[29] To restrict the issuance of corporate bonds, the Chinese government promulgated a number of regulations soon after. For example, a maximum of 20 percent above bank

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[27] Hu, Yebi. China's Capital Market. Hong Kong: The Chinese University Press, 1993, pp.8-9.
[28] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June, 1995, p.10.
[29] Hu, Yebi. China's Capital Market. Hong Kong: The Chinese University Press, 1993, p.8.

interest rate was set as the ceiling for the coupon rates of corporate bonds. Furthermore, bond issuers must obtain prior approval from the PBC before making an offer.

# CHAPTER V

# THE DOMESTIC BOND MARKET

## Primary Market

### Issuers

In the China domestic bond market, only the MOF is a regular issuer. Other big borrowers include state-owned enterprises and financial institutions. Except MOF, other issuers need to apply for debt issuance quotas every year from the relevant government agencies, usually the State Planning Commission (SPC) and the PBC. The government agencies will spread the limited quota around. By far, the largest issuer is the MOF and thus treasury bonds are the largest issue type. Between January 1981 and December 1993, treasury bonds accounted for 282 billion yuan among the 544 billion yuan of all bonds issued. In order to reduce confusion, the MOF simplified the bond types by gradually decreasing the fiscal and special government bond issues in recent years. Finally, in 1994, the MOF issued treasury bonds only.

### Issue Procedure of Government Bonds

The methods used to issue government bonds have been evolved from an administered placement method to a more market-oriented approach. Until 1991, treasury bonds were placed with enterprises and individuals entirely on a mandatory basis. Basically, each year the MOF fixed the proportion of bonds to be allocated at the provincial level for the coming year to individuals, groups and institutions. The pattern of allocation was typically fixed based on the total payroll, the savings rate and the general economic conditions of different provinces. Then, each provincial finance bureau decided how to allocate the bonds within the province. At the local level, quotas were distributed among production units. In turn, each unit assigned the bonds to its workers. Practically, allocations to individuals were often carried out by deducting their pay, while allocations to enterprises were achieved by withholding the amounts from their bank accounts.

In April 1991, the MOF for the first time experimentally adopted an underwriting syndicate of securities dealers to launch a bond issue on an voluntary basis. The syndicate was entrusted with the issue of 2.5 billion yuan, out of the total 19.9 billion yuan worth of treasury bonds issued in that year. A private agency, the Securities Exchange Executive Council (SEEC) acted as coordinator of the underwriting which involved 58 financial institutions. The underwriters received a commission of 0.15 percent of the underwritten amount and sold the bonds on a voluntary basis to clients. The practice was so successful that the MOF adopted it on a larger scale in 1992 for the issuance in which underwriting syndicate responsible to distribute 3.6 billion yuan worth of treasury bonds. In the same year, the traditional administrative allocation was still the main issuing method which accounted for 36.7 billion yuan worth of treasury bonds. The relative success of underwriting in 1991 and 1992 could be partly attributed to the relatively attractive coupon offered on the treasury bonds compared with other available investment tools.

In 1993, due to competition from the booming equity and property markets and higher returns on enterprise debt, underwriting syndicate failed to form because the securities dealers believed that the yield of treasury bonds was too low to attract enough investors. Therefore the MOF had to revert to mandatory allocations to distribute the bonds in that year.

The bond market revived in 1994 when a new distribution system was implemented. Under the new structure, PBC has become responsible for the placing of all treasury bonds. The PBC also acted as the chief coordinator to organize a national underwriting syndicate to handle all government bond issues. The underwriting syndicate comprised more than 40 government bond primary dealers, each of them needed to distribute at least one percent of each issue in order to hold their primary dealer status. These dealers were typically experienced and well-capitalized bank subsidiaries and securities firms. They were chosen jointly by the MOF, the PBC and the China Securities Regulatory Commission (CSRC). Each member was then responsible to distribute the bonds to the investors through thousands of their branches and outlets all over the country.

For the year 1994, the treasury bonds were issued in 4 different periods and 4 issue methods were utilized. First, 13 billion yuan worth of paperless treasury bonds with maturity of 6-month and 1-year were issued via underwriting agreements. The underwriters which mainly formed by designated primary dealers were given one week to place the debt. Afterwards, the debt was listed on the Shanghai stock exchange. Second, 28 billion yuan of two year bearer treasury bonds were sold through local financial department. The local financial departments signed 'underwriting agreements' with local financial institutions which then sold the bonds to individuals and other entities. Third, 2 billion yuan of five-year bearer treasury bonds were assigned directly to institutions. Finally, the largest part of the year's issue, 70 billion yuan worth of treasury bonds with maturity of three years were allocated by PBC to the headquarters of the specialized banks which in turn distributed them to provincial and local levels. These bonds were redeemable at the bank of issue after six months. However, they were not tradable.

For the underwriting method of 1994, underwriters were supposed to compete for an allocation of treasury bonds through a three-part bid covering: the amount to be underwritten, the speed at which funds received from the sale of treasury bonds would be repatriated back to government and the underwriting fee. For the first time, the target market was wholesale rather than retail. However, this method accounted for only 11.7 percent of the year's issue, even less than the 12.5 percent placed by underwriting in 1991. There were some difficulties to move away from administrative placement system. First, within the framework of the credit plan, the fulfillment of placement quotas could no longer be assured. Second, the coupon rate of the treasury bonds were not competitive for underwriters and primary dealers. Third, institutional buyers are not at present accustomed to government bond purchase.

In 1995, China issued one-year treasury bonds for the first time using auction method. The volume was 11.6 billion yuan. For this issue, no physical bond paper was printed. Ownership registration, clearing and transaction can be done through computer systems which connected the Shanghai, Shenzhen, Wuhan and Tianjin securities exchanges and the STAQS. This method of bond issuance can increase the efficiency of treasury bond issuance, decrease the costs in certificate printing, transportation and destroying.

### Issue Procedure of Non-Government Bonds

The distribution of non-government bonds does not need to resort to mandatory allocation. Local state-enterprises can issue bonds with the approval of the local State Planning Council and the local PBC, which will then allocate the quota to the locality according to the credit plan. The PBC head office is responsible to supervise the aggregate volume of enterprise bonds issues. The allocation of the quota between enterprises is based on financial and political criteria. An acceptable rating by a credit rating agency is necessary. Practically, the priorities of industrial policy are also very important. For both enterprise bonds and financial institution bonds, they are often sold to individual investors locally through retail branches of banks and securities firms. These non-government bonds are more popular than the government counterparts because investors are attracted by the higher rates offered on these bonds. Furthermore, the smaller sizes of these issues make them more suitable to be distributed through a retail network.

### Issue Characteristics

The sale of treasury bonds using paperless method permitted a much shorter issue period. Thus in 1994 the two paperless issues took less than a week each.[30] But the two-year bearer issue took two months to place[31] and the three-year treasury bill certificate took even longer, four months[32]. For the paperless issues, the underwriters needed to sell the bills within a specified period. At the end of the period, the underwriters had to remit the funds and the unsold subscriptions to the MOF. The issues were then declared tradable immediately. For the two- and three-year treasury bills, funds raised were remitted to the MOF's account at the PBC by each underwriter, according to the terms of their individual underwriting agreements, rather than on a daily basis. The final payment was made after the closure of the issue period.

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[30] The six month paperless issue was placed between January 25 and January 31, and the one year paperless issue was placed between February 1 and 3.
[31] From 1 April to 31 May.
[32] From 1 April to 30 July.

Generally, the size, interest rate, maturity and other terms of each bond issue have to get approval from the State Council which in turn would consult the PBC. Until 1984, the maturity of treasury bonds issued was 10 years. Since then, the MOF attempted to make treasury bonds more attractive by shortening the maturity to 5 years and then 3 years. And in 1994, treasury bonds with maturity of 6 months, one year and 2 years appeared[33].

Typically, government bonds are issued at par and they usually carry a predetermined coupon. Before 1995, no auction process was used to determine the yield in the primary market. Coupon rates of treasury bonds were set at about 150bp to 200bp above the rates on savings deposits of comparable maturity without reference to the secondary market yield. This reveals the administratively determined interest rate structure and the role of debt issues plays in the Credit Plan. The rates on fiscal bonds, however, may be below the deposit rates, and the rates on special government bonds were sometimes pegged to an inflation index. Besides, the five-year 1993 issue and the scripless issue of 1994 which pay an annual coupon, coupon on treasury bonds was paid in full at redemption. Coupon was paid in a lump at maturity rather than being compounded. This is because majority bonds were issued to individuals in bearer form with small denominations, which made it difficult to pay intervening coupon. In addition, this style of coupon payment made it more likely that the treasury bonds would trade in the secondary market at a price above par. In such a less sophisticated market this assisted primary sales.[34]

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[33] See Table IX-1.

[34] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.14.

As explained before, until 1989 the coupon on treasury bonds sold by mandatory placement to institutions was less than that on treasury bonds sold to individuals. The rates are summarized in Table V-1. The difference was abolished since 1989.

**Table V-1: Comparison of Coupon on Treasury Bills Sales by Purchaser**

| Year | Households | Enterprises |
|---|---|---|
| 1982 | 8 | 4 |
| 1983 | 8 | 4 |
| 1984 | 8 | 4 |
| 1985 | 9 | 5 |
| 1986 | 10 | 6 |
| 1987 | 10 | 6 |
| 1988 | 10 | 6 |
| 1989[a] | 14 | 15 |
| 1990[a] | 14 | 15 |
| 1991[a] | 10 | 9 |

Source: IMF (1991)
[a] Rate on special state bonds given for enterprises.

Enterprise and financial bonds are different from government bonds that they employed both annual coupon and lump coupon payment methods. The ceiling of the coupon on enterprise bonds is set at 20 percent above the deposit rate. In addition, the MOF does not allow the coupon of non-government bonds to exceed that on treasury bills in order to reduce competitive pressure on treasury bill sales. However, by offering a lower fee and discounts, the corporate bonds usually result in a coupon two to three percent more than that of the treasury bill.

### Interest Rate Subsidy

One special feature of the China's treasury bond is the attachment of interest rate subsidy. Let us go into some details about this.

Interest rate subsidy was first introduced in 1988 so as to ease inflation. That year, because of the rapid price reform, nation-wide wave of inflation was initiated.

Therefore, the government introduced the interest rate subsidy. According to the price index, which is disclosed regularly, the Central Bank determined the rate of subsidy. The subsidy rate was applied to three-year or longer fixed bank deposit and treasury bonds. The interest rate subsidy aims at stabilizing the saving of citizens, forbidding them from injecting too much money into the market. It was abolished in late 1991 but reused in 1993 when inflation increased.

For treasury bonds with maturity shorter than 3 years, interest rate subsidy was not applied. Therefore, short-term bonds were a less expensive means for the state to raise fund. On the contrary, long-term bond is a great burden to the MOF since the interest rate subsidy greatly increases the amount of repayment.

In December 1995, the interest rate subsidy rate reached its peak of 13.24 percent. It had declined to 10.83 percent in February 1996. As a result of the macro-economic control, inflation was significantly reduced and stabilized in 1996. Therefore, started from 1 April 1996, interest rate subsidy was abolished.

## Credit Rating Agencies

Since 1991, the central government has been encouraging the development of credit rating agencies. To disclose their rating, rating agencies must get approval from the PBC beforehand. However, up to now, only two rating agencies were approved by the headquarters of the PBC. In addition, some other agencies were also approved at a local level. Overall, 82 credit rating companies were approved. Amongst, about 30 operate at a national level.

Quite confusing, some of the rating agencies called themselves accounting firm or consultant firm rather than credit-rating agencies. Furthermore, the ownership structures of those companies are diverse, showing the variety of entry points into the new industry. In reality, some regional rating companies are subsidiaries of the local PBC. Of the two credit rating companies in Shanghai, one is a subsidiary of the Shanghai Academy of Social Sciences and the other is a subsidiary of the Shanghai University Institute of Finance and Trade.

Theoretically speaking, rating agencies should help to distinguish the poorly performing companies from those with acceptable performance. Then, according to the rating, the PBC and SPC can grant the bond issue quota to suitable enterprises, and investors can make their smart investment decisions. But in China, the role of rating agencies is marginal. The PBC and SPC make the decision of issue quota allocation mainly based on state policy rather than the companies' credit rating. Moreover, investors do not place enough concern on the rating because state-owned enterprises rarely fail and investors have excess investible funds on hand.

## Secondary Market

### Development of Spot Market

During 1981 when government bonds reappeared in China, private transaction of the bonds was regarded as illegal behavior. With more and more government bonds being issued, the demand for a secondary market increased. On August 5, 1986, the Shengyang city branch of the PBC approved a request of the Shengyang Investment and Trust Inc. to open a business counter for transactions of financial securities. By the end of 1987, there were many brokerage companies, investment and trust firms, and credit unions providing financial securities exchange business in 41 cities around the country. In April 1988, the State Council approved the secondary markets for government bonds on a trial basis. The first group of experimental secondary markets were established in Shengyang, Shanghai, Chongqing, Wuhan, Canton, Harbin, and

Shenzhen. In June of 1988, there were another 54 cities that got approval to start secondary markets. The existence of secondary markets for government bonds enable individuals to cash in their holdings before maturity and make the bonds attractive investment for those individuals with liquid savings. The PBC approved the establishment of 34 financial securities firms during the same year.[35]

In 1988, treasury bonds issued to individuals in 1985 and 1986 became tradable to accommodate early redemption since the government wanted to eliminate the black markets for these bonds. Until 1991, trading in treasury bonds was conducted exclusively in the over-the-counter (OTC) market. Due to the lack of a nation-wide network, this OTC market was characterized by significant price differentials across regions, reflecting different supply-demand conditions and expense involved in moving paper from one market to another. At that time, demand appeared stronger in Shanghai than to other cities. Some Shanghai securities firms thus tried to earn arbitrary profits by establishing channels to buy bonds at lower prices in other cities for resale in Shanghai. Municipal authorities generally disapproved of this as it represents a net outflow of funds.

The development of the securities market had a significant breakthrough in 1990. In February, Shanghai and Chongqing started to allow treasury bonds issue in 1987 and 1988 to be traded in the market. In May, more than 20 provinces and cities approved the legal trading of treasury bonds issued from 1982 to 1988. In some coastal cities, treasury bonds issued in 1989 were also allowed to enter the market. More tender price fluctuation was one significant improvement in 1990. After large-scale secondary markets were opened, combining with the decreasing interest rates

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[35] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, pp.261-262.

trend and an easing of inflationary expectations, there was a steady price increase for the government securities. The effective yields of government securities were close to the return on time deposits with equivalent maturity terms.

Another significant event in 1990 was the establishment of the nationwide information and exchange network. Before that, there was notable price differentials across cities because of different supply-demand conditions in different cities. A preliminary uniform national market enabled the prices on government securities, especially on treasury bonds, to converge in different regions.

Then in 1994, in order to enhance the liquidity of the bond market, several reform measures were implemented. First, in addition to the responsibility to distribute treasury bonds in the primary market, the designated primary dealers are required to maintain a certain trading volume in the secondary market. These dealers are also expected to co-operate with the PBC in the course of the conduct of open market operations. Second, all tradable treasury bonds issued this year are registered on the SHSE book-entry system to facilitate centralized clearing of all treasury bond sales.

This is the first step toward eliminating the inefficiencies and inconveniences associated with trading bearer-form bonds.[36]

### Development of Futures and Repurchase Markets

Besides the spot market, there are bond futures and repurchase markets. The first bond futures contract was launched on December 28, 1992. The market started to really operate at the end of 1993. The trading volume of bond futures contract was sluggish at the beginning, but became quite active afterward. Since 1993 and 1994,

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[36] Zhang, Yi-Chen, and Yu, Da. "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p113.

bond futures were traded on SHSE and SZSE respectively. These two exchanges are the main floor for bond futures trading afterward. Bond futures contract provides a full set of hedging vehicles and various synthetic short-term instruments for investors.

Facing the high-inflation environment and the existence of interest rate subsidy, individuals used futures to speculate against the inflation. Therefore, the trading volume of bond futures in the last couple of years climbed to an unprecedented high level. The bloom of bond futures market in turn led to increased liquidity of the underlying security. However, because of an illegal incidence occurred in 1995, the trading of bond futures was suspended in May 18, 1995.

The government securities repurchase market exists in some rudimentary forms in both SHSE and STAQS. In SHSE, repurchase agreements are standardized one-month, three-month, and six-month term contracts, whereas in STAQS, they are typically structured to suit both buyers and sellers.

### Trading Centres

Shanghai, Shenzhen, STAQS and Wuhan are the four principal bond markets in China. Besides, there are many regional markets whose sizes are relative small comparatively. By the end of 1992, China had more than 85 professional security-exchange brokerage companies, over 1200 trust and investment firms.[37] The number of brokerage branches of securities firms through which investors all over the country participate in the market had grown to over 3,000 by the end of 1993.[38]

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[37] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.259.
[38] Zhang, Yi-Chen, and Yu, Da. "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p.116.

SHSE is the first stock exchange of the PRC. The PBC approved its establishment on November 26, 1990 whereas its grand opening was on December 19, 1990. SHSE is a non-profit legal entity organized generally by following the international standard for a stock exchange. Besides providing a physical space for securities trading, SHSE is responsible for organizing and managing transactions among traders, providing securities trading information, approving or disapproving of application of securities to be traded in it, organizing the trading and settlement process, etc. By late 1990, the daily trading volume of bonds on SHSE was on average 950,000 yuan.[39] At the beginning of 1991, there were 31 securities traded in the SHSE, among which 6 were government bonds, 9 were financial bonds, 8 were corporate bonds and 8 were stocks.[40] Compared with other exchanges, SHSE is more advanced that it has a system using magnetic cards for record-keeping and for transaction of securities. The cards are mainly used for equity transactions. However, the scripless treasury bills issued in 1994 can also be traded through this system.

STAQS is a centralized securities trading system established on December 5, 1990. Being centred in Beijing, STAQS utilizes a telecommunication network which allows instantaneous trading of treasury bonds via computer. Users can get immediate price quotation and trade through party-to-party negotiations. Up to 1993, there were eighteen securities firms and state-investment corporations in Beijing, Shanghai, Shenyang, Wuhan, Guangzhou and Haikou participated in the STAQS. The STAQS plays a vital role in providing timely and accurate market information, faster order entry and execution, more efficient and reliable clearing and settlement, and more

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[39] Holz, Carsten. The Role of Central Banking in China's Economic Reforms. Ithaca: Cornell University Press, 1992, p.86.
[40] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.268.

effective regulation. The establishment of STAQS helps to end the fragmented status of China's securities market, facilitate the development of a nationwide securities market, and create a desirable securities-trading environment in the futures.

SZSE was established in July 1991. It has been active in developing a bond market since late 1993. The Wuhan, Shanghai and Shenzhen exchanges have an estimated common membership of 100-150 brokers. Many of these brokers belong to STAQS. Each of the four principle exchanges has satellite links which provide members across the country with real-time quotation and transaction data. Order placement and confirmation is by telephone or fax on the SHSE, at Wuhan, and on STAQS. Besides STAQS, no exchanges has developed electronic over-the-counter trade.

**Trading Volume and Liquidity**

In 1988, total transactions in the security markets were 2.63 billion. Amongst, 92.1 percent were treasury bonds, 4.4 percent corporate bonds, 2.6 percent financial institution bonds, 1.4 percent key state construction bonds, and 0.5 percent bank CDs in large denominations. The volume of security trading in 1989 declined by 12 percent to 2.3 billion yuan. One of the reasons for the decrease is the negative effect induced by the June 4th Tiananmen Square incidence. Another reason is that no new treasury bonds were allowed to be traded in 1989. Market trading of treasury bonds was restricted to those issued in 1985 and 1986 only.[41] Then, the secondary treasury bond market revived and, within one year time, the trading volume increased more than 5 folds from 2.1 billion to 11.6 billion yuan. The trading volume of treasury bond then

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[41] Gang, Yi. Money, Banking, and Financial Markets in China. Boulder: Westview Press, 1994, p.262.

increased continuously with a peak of 108 billion yuan in 1992 (see Table IX-2). The decline in 1993 was due to the higher return of equity and real estate markets. As a result, capital was diverted into those attractive sectors.

Compared with equity, the secondary bond market in China was not liquid enough. In 1993, the volume of equity trading was equal to 25 times of volume on issue. But for bond, the ratio of trading volume to volume outstanding was less than one. Although equity only accounted for less than one-tenth of securities on issue in that year, the value of equity trade was 5 times as debt. In early 1995, because of the heat of bond futures, the liquidity of the spot bond market was also increased (see Table V-2 and IX-3).

**Table V-2: The Situation of China's Bond Market**

| Types | Items | 1994 | 1995[a] |
|---|---|---|---|
| **Spot** | Number of listed | 6 | 6 |
| | Trade Volume (Y billion) | 45.73 | 66.34 |
| **Futures**[b] | Number of listed | 13 | 0 |
| | Trade Volume (Y billion) | 1,905.42 | 4,939.16 |
| **Repurchase** | Number of listed | 5 | 6 |
| | Trade Volume (Y billion) | 6.32 | 84.57 |

Source: Liu, Pei-Qiong. Zhong Guo Jing Ji Da Qu Shi 1996. Commercial Press, 1996.

[a] Calculated from statistical data up to October 31, 1995.

[b] Bond futures trading was suspended started from May 18, 1995.

## Causes of Lack of Liquidity

### Primary Market Practices

The first cause of the illiquid secondary market is the lack of homogeneity in the stock of debt which reduces the amount of any one type of debt which is available for trading. The coupons and maturities offered in treasury debt varied from year to year. The segmentation effect created a thin secondary market. Secondly, the issuance of treasury bonds have been focused on individual investors rather than institutional investors. Since individual investors usually hold the treasury bonds until maturity, the main participants in the secondary market are institutional investors. However, individual investors hold the majority of the outstanding treasury bonds. Third, the yield at issue is not related to secondary market yield. Due to linking of the coupon to deposit rates, and issuing at par, the YTM of a treasury bond at issue may be either above or below the secondary market yield. If the issue yield is below secondary market yields, the treasury bond sells, as the coupon is competitive by comparison with alternative returns on deposits and loans. But an issue yield less than secondary market yield inhibits secondary market trading as investors are reluctant to sell at a loss. Fourth, the primary issue is not distributed over the year. The lack of a regular issue calendar inhibits liquidity in two ways. On one hand, without a regular issue program, there cannot be a continual supply of short dated money market paper from which a short-end yield curve can develop. This inhibits money market development, reducing the supporting role the money market plays to the bond market. On the other hand, there are no new issues to act as a market benchmark. Typically as debt issues age, an increasing proportion is held by end-holder investment portfolios rather than trading portfolios. Fifth, the variety of maturity of treasury bond is limited. The market is dominated by 3- to 5-year species, short-term and long-term bonds are not enough to match liability and change in duration of portfolio. Sixth, accurate pricing of the treasury bonds is difficult because of the untypical method of coupon payment. The first cause of uncertainty is the correct basis on which to quote bond yields: payment of accumulated simple interest on maturity has led to bond prices being quoted on a current yield basis rather than a yield to maturity basis. The second cause of uncertainty is the inflation subsidy which made future payoff of treasury bonds open to different expectations. Anyway, inflation subsidy was already abolished in 1996.

## Market Infrastructure

The second group of causes concerns the supporting market infrastructure. First of all, the money market does not assists bond market liquidity through the provision of funding for bond portfolios via either loans or repurchase agreements. Repurchase agreement (repos) can increase liquidity by enabling investors to quickly obtain funds without having to sell their bonds. Trading of repos in 1994 is estimated to have reached 314 billion yuan as described in Table V-3. This amounted to an estimated 10 percent of bond trading volume in 1994.

**Table V-3: Trading of Repurchase Agreements in 1994 (Y billion)**

| Trading Centre | Trading Value |
|---|---|
| Wuhan Securities Trading Centre | 160.0 |
| STAQS | 290.0 |
| Shanghai Stock Exchange | 63.0 |
| Shenzhen Stock Exchange | 1.3 |
| Total | 314.3 |

Source: SEEC

There are mainly four core deficiencies of the money market, in terms of its potential support to the bond market. First, the money market is geographically segmented which implies that funds in the provinces are unlikely to be available to finance bond transactions on one of the major exchanges. This inhibits the formation of an unified bond market. Second, the money market is institutionally segmented. Regulations exist to control which parties are permitted to transact and the maturities that can be offered. Moreover, bank sub-branches manage their own liquidity on the basis of their allocated capital and credit. The lack of centralized liquidity management also acts as a factor preventing the development of a short-term yield curve. Third, interest rate ceilings on both loans and repos prevented the development of a short-term yield curve since there is no regular supply of short-dated treasury bills to provide a liquid and low-risk instrument to act as a short-term benchmark. Fourth, The treasury risk management capability of banks and other financial institutions is very thin due to a lack of incentives to manage risk. Developing this capability will be hindered by the cumbersome reserves methodology of PBC.[42] Estimates of money market trading volumes and assets of users are available in Appendix Tables IX-4 and IX-5.

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[42] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, pp. 20-21.

# CHAPTER VI

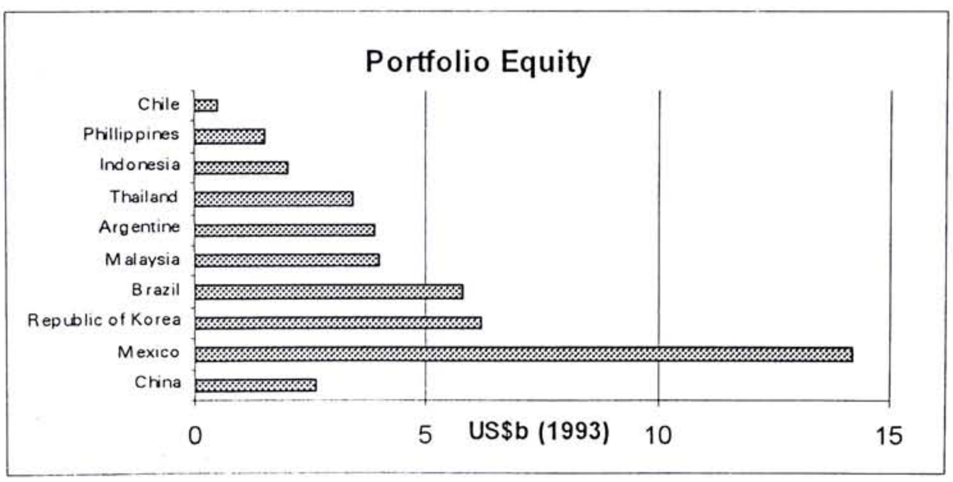
# THE INTERNATIONAL BOND MARKET

## Foreign Participation in China's Domestic Bond Market

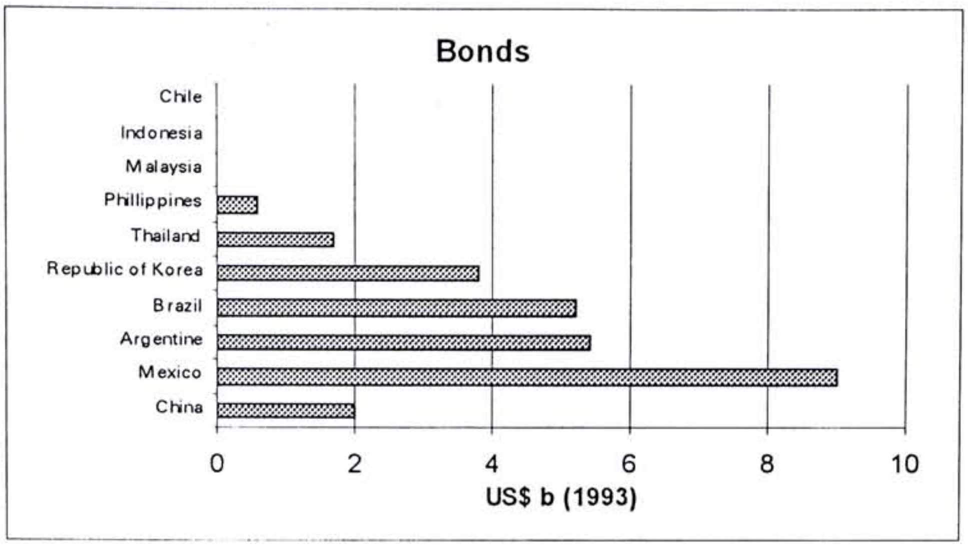
Unlike stock markets, money and bond markets in China remain closed to foreign investment. While the international experience suggests that foreign portfolio investment has been increasing the most rapidly, resource inflows to China have been increasingly skewed towards foreign direct investment (FDI), which accounted for more than two-thirds of the total net private investment flows to the country in 1993.

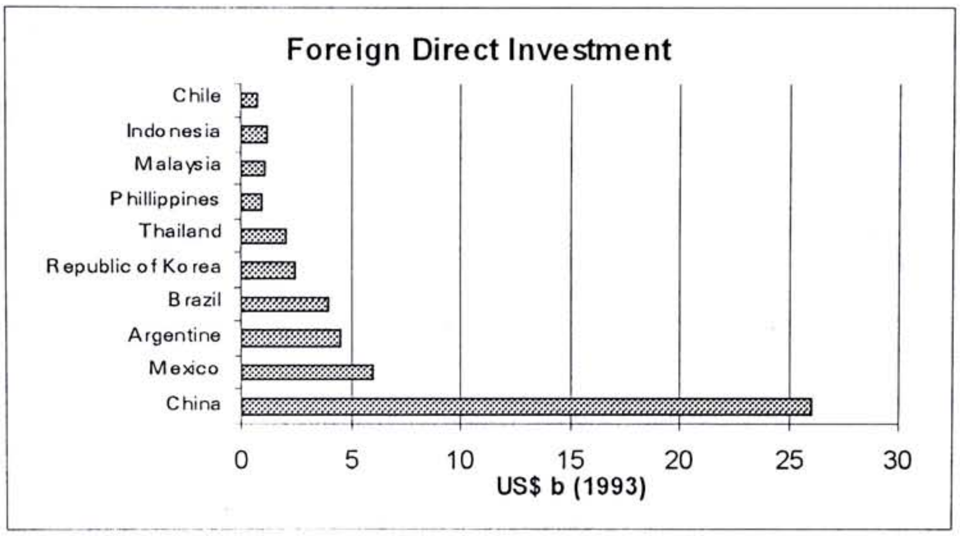
The increase in private resource inflows to China parallels a global trend of rapidly increasing private resource inflows to emerging market economies. However, the composition of external investment flows to China is strikingly different from comparative countries.[43] This is illustrated in the following figures.

**Figure VI-1: The Participation of Emerging Markets in International Capital Flows**




[43] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.26.




## China's Overseas Bond Issues

### History

In 1987, China has begun to tap the international bond markets for much-needed foreign exchange to bolster domestic economic expansion. It accessed the Eurobond market for the first time as a sovereign borrower. Since then, it has followed a gradual and methodical approach, borrowing more as its economy grows and as its exports increase. By first establishing its international credit ratings, China has successfully managed to launch a Euroyen issue in September 1993, a Dragon bond in October 1993, culmination in a $1 billion global bond issue in February 1994 and a recent ¥60 billion Samurai issue. With strong capital demand and high prospective investment returns, China is expected to remain a regular borrower in the international markets. The $1 billion global bond issues was the largest amount ever issued by China. These funds will be used to finance energy, transportation and communication projects. Besides, the raising of the China's debt rating by two US credit agencies, Moody's and Fitch has facilitated the global bond's issuance.

The following table shows the China's foreign currency bonds issued overseas.[44]

**Table VI-1: China's Foreign Currency Bonds Issued Overseas**

| Date of Issue | Issuing Authority | Amount | Term (Years) | Market |
|---|---|---|---|---|
| 82 | CITIC | 10b yen | 12 | Tokyo |
| 83 | FIEC | 5b yen | 10 | Tokyo |
| 84 | BOC | 20b yen | 10 | Tokyo |
| 85 | CITIC | 30b yen | 10 | Tokyo |
| 85 | BOC | 20b yen | 10 | Tokyo |
| 85 | BOC | DM 150 m | 7 | Frankfurt |
| 85 | CITIC | HK$ 300m | 5 | Hong Kong |
| 85 | CITIC | DM150 m | 6 | Frankfurt |
| 85 | BOC | US$ 150m | 10 | Tokyo |
| 85 | BOC | 30 b yen | 10 | Tokyo |
| 85 | FIEC | 10 b yen | 10 | Tokyo |
| 85 | CITIC | US$100 m | 10 | Tokyo |
| 86 | SITC | 25 b yen | 10 | Tokyo |
| 86 | CITIC | 50 b yen | 10 | Tokyo |
| 86 | BOC | US$ 200m | 10 | Tokyo |
| 86 | BOC | HK$ 400 m | 12 | Tokyo |
| 86 | BOC | 20 b yen | 10 | Frankfurt |
| 86 | CITIC | US$ 50 m | 7 | Hong Kong |
| 86 | GITIC | 10 b yen | 10 | Tokyo |
| 86 | FIEC | 20 b yen | 10 | Singapore |
| 86 | TITIC | 10 b yen | 10 | Tokyo |
| 87 | CITIC | 30 b yen | 5 | Tokyo |
| 87 | CITIC | 10 b yen | 5 | Singapore |
| 87 | CITIC | 30 b yen | 10 | Tokyo |
| 87 | BOC | US$ 200 m | 10 | Singapore |
| 87 | FIEC | 10 b yen | 10 | Tokyo |
| 87 | BOC | 15 b yen | 5 | Tokyo |
| 87 | GITIC | US$ 50 m | 5 | Hong Kong |
| 87 | BOC | US$ 200 m | 5 | London |
| 87 | MOF | DM 300 m | 5 | Frankfurt |
| 88 | CITIC | 15 b yen | 5 | Luxembourg |
| 88 | BOC | 15 b yen | 5.25 | Luxembourg |
| 88 | GITIC | 20 b yen | 5 | London |
| 88 | SITC | 15 b yen | 7.25 | Luxembourg |

[44] "Chinese Bonds in the Introduction of Foreign Capital." China Newsletter, August 1989, pp.19-27.

| | | | | |
|---|---|---|---|---|
| 88 | Bank of Communication | HK$ 200 m | 5 | Hong Kong |
| 88 | CITIC | 15 b yen | 5.25 | Singapore |
| 88 | Bank of Communication | US$ 100m | 5 | Singapore |
| 88 | FIEC | 15 b yen | 10 | Tokyo |
| 88 | TITIC | 10 b yen | 10 | Tokyo |
| 89 | BOC | 20b yen | 10 | Tokyo |
| 91 | BOC | 20b yen | 5 | Tokyo |
| 92 | BOC | 15b yen | 5 | Tokyo |
| 92 | BOC | US$ 0.15b | 5 | Singapore |
| 93 | BOC | 15b yen | 5 | Tokyo |
| 93 | BOC | 15b yen | 7 | Tokyo |
| 93 | BOC | US$ 0.2b | 5 | London |
| 94 | BOC | US$ 0.5b | 5.2 | New York |

CITIC: China International Trust and Investment Corporation
FIEC: Fujian Investment Enterprise corporation
BOC: Bank of China
SITC: Shanghai Investment & Trust Corporation
GITIC: Guangdong International Trust and Investment Corporation
TITIC: Tianjian International Trust and Investment Corporation
Remark: For the year 89 to 92, only those data for the BOC could be obtained

## Convertible Bonds and Bond Derivatives

Chinese borrowers remain relatively inactive in convertible bonds and bonds with derivative elements. Only three issues have been launched: China Textile Machinery's $23 million equivalent of SFR-denominated 5 year convertible bond, in November 1993, and two separate 7 year US dollar bond issues, with a 'put' option, by Shandong Industrial Trust & Investment in July 1994 ($130 million) and September 1994 ($150 million).

China has not been a major participant in overseas markets for bonds with derivative elements. Some engagements in derivatives by Chinese enterprises led to large loss-marking in 1994, as a result of which financial operations in international derivatives markets grew more tightly controlled.

## Issues Procedures

The domestic organization of overseas bond issues still form a part of the annual credit plan, and part of the foreign borrowing quota. The allocation is determined by the PBC. Approvals are also required by the State Administration of Exchange Control for medium- to long-term issues. Convertible securities are regulated by both the SAEC and the CSRC.

China's international bond issues have been carried out by certain financial institutions comprising selected banks and those trust and investment corporations authorized to engage in international operations.[45]

### Possible Problems with the Issues Procedures

First, the domestic procedures do not ensure that proceeds from foreign bond issues eventually go to the projects with the highest returns. This is because the allocation of the 'residual' quota among provinces requires distribution criteria and bargaining elements. On lending terms for overseas loans to eventual domestic borrowers is not clearly defined.

Second, the issues procedures placed too much dependence on the 'windows' for international bond issuance. This is only preferable if all the windows have good credit rating which could result in cost-effectiveness. However, for those windows that have weak balance sheets a cost ineffectiveness could result. Moreover, the procedures can encourage back-door financing activities, such as inducing offshore borrowing by Chinese enterprises through their foreign subsidiaries.

### China's International Bond Issuers

The following table shows the largest issuers of the China institution in the international bond market.

[45] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.28.

**Table VI-2: Major Issuers of the China's International Bond**

| Issuer | No. of issues | Amount ($ million) |
|---|---|---|
| People's Republic of China | 5 | 2,196 |
| Bank of China | 7 | 1,283 |
| China International Trust & Investment | 3 | 681 |
| People's Construction Bank of China | 5 | 364 |
| Guangdong International Trust & Inv. | 2 | 300 |

Source : "Asia/Pacific: China." Euromoney Handbook, September 1994.

Up to 1994, only 10 domestic issuers can tap the international market, usually for project-based investment . These 10 authorized institutions had been referred to as the '10 windows.' The 'windows' act essentially as intermediaries, who on-lend to domestic end-users. Among the 'windows', CITIC and the Bank of China (BOC) have been the most active. In the late 1980s, these were the only two institutions issuing debt.

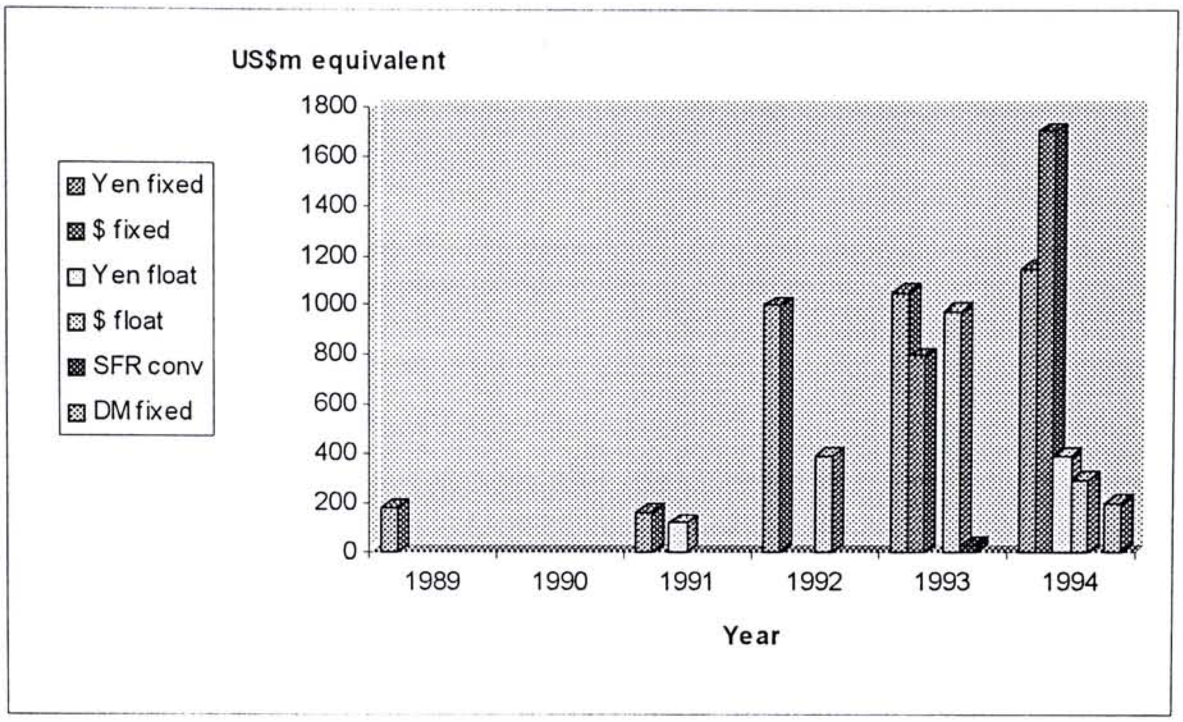
### Trend of International Issuance

As mentioned before, China's access to international capital markets has expanded substantially in recent years. The annual volume of new overseas bond issues has grown remarkably fast, expanding from less than $200 million a year, on average, over 1989-91, to over $2 billion per year for 1992-94.

In terms of currencies, China's overseas bond issues have been concentrated in two currencies, the Japanese yen and the US dollar. However, as the yen becomes stronger and the dollar's interest rate becomes smaller, the new issues have shifted away from yen towards US dollars. The following figures illustrated the situation.[46]

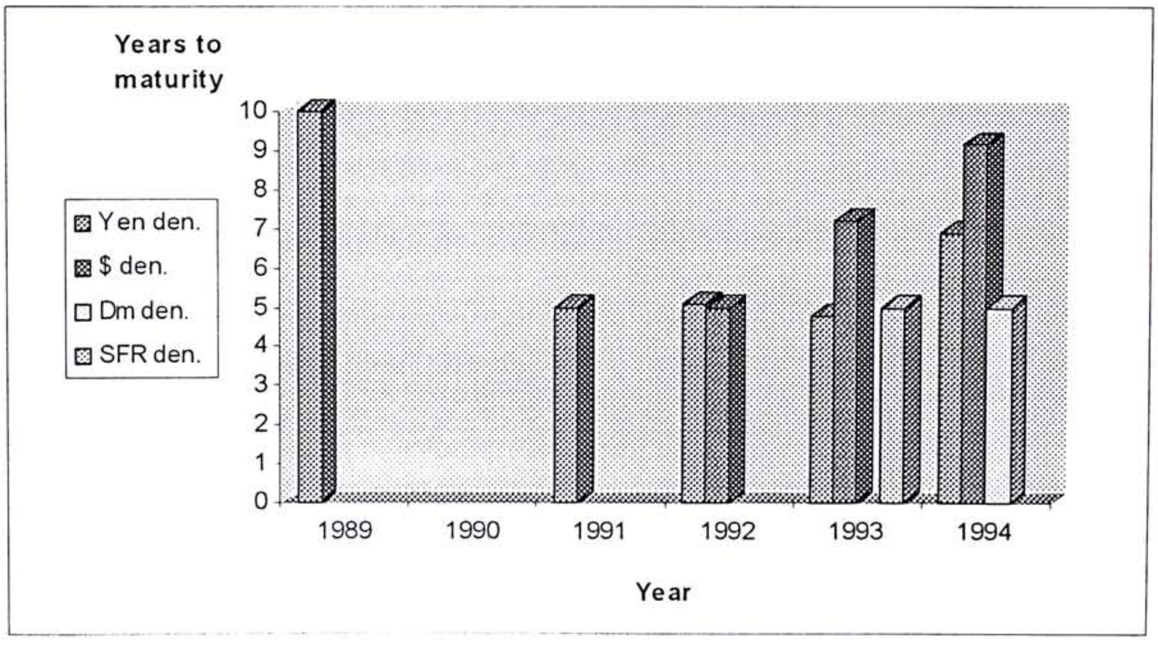
[46] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.27.

**Figure VI-2: International Bond Issues by Chinese Borrowers (by Currency)**




In terms of rate structure, recent historically low interest rates in major markets led to a concentration of new issues in fixed rates (70 percent). The average maturity of new bond issues has increased every year since 1991.[47]

**Figure VI-3: International Bond Issues by Chinese Borrowers (by Type & Maturity)**




[47] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.27.

In 1994, new US dollar bonds had an average maturity of 9.3 years, compared to 5 years in 1992. Yen bonds in 1994 averaged close to seven years, compared to around five years in 1992 and 1993.

## Choices of Markets for Issuance

The choice of specific markets is based on the combined considerations of: relative prevailing rates; listing costs; issue and listing processes (for example, the Euromarket is usually considered to have a simpler listing process); general market recognition and reception (Asian markets are relatively favorable to China); diversification; and market liquidity.[48]

[48] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.28.

# CHAPTER VII

# DEBT MANAGEMENT OF CHINA

## Causes of the Mexico Crisis in 1995[49]

In the first quarter of 1995 Mexico found itself in the grip of an intense financial panic. Foreign investors fled Mexico despite very high interest rates on Mexican securities, an undervalue currency, and financial indicators that pointed to long-term solvency. The fundamental conditions of the Mexican economy cannot account for the entire crisis. The crisis was due to unexpected shocks that occurred in 1994, and the inadequate policy response to those shocks. In the aftermath of the March assassination the exchange rate experienced a nominal devaluation of around 10 percent and interest rates increased by around 7 percentage points. However, the capital outflow continued. The policy response to this was to maintain the exchange rate rule, and to prevent further increases in interest rates by expanding domestic credit and by converting short-term peso-denominated government liabilities falling due into dollar-denominated bonds. A fall in international reserves and an increase in short-term dollar-denominated debt resulted. The government simply ended up illiquid, and therefore financially vulnerable. Illiquidity exposed Mexico to a self-fulfilling panic.

To sum up, the causes of the Crisis was due to:

- the foreign capital inflows into the country was mainly short-term equities and bond purchase;
- negative current account deficit;
- the liquid reserve was smaller than the short-term liabilities;

[49] NBER Working Paper Series. Working Paper No. 5142. The Collapse of The Mexican PESO: What Have We Learned? June 1995. p.1.

- three shocks - the Colosio assassination in March; the resignation of the Deputy Attorney General in November and the rumors surrounding devaluation in early December
- inappropriate policy response towards the capital outflow

## An Analysis of the China's Current Situation

### Compositions of Foreign Capital Flow into the Country

As mentioned before, while the international experience suggests that foreign portfolio investment has been increasing the most rapidly, the resource inflows to China have been increasingly skewed towards foreign direct investment (FDI), which accounted for more than two-thirds of the total net private investment flows to the country in 1993.[50] Therefore, the foreign capitals that currently present in China is less liquid than those in the other countries. Besides, money and bond markets in China remain closed to foreign investment. This is favorable as China still does not have effective market instruments to conduct efficient policy actions, such as sterilization, to deal with large inflows of capital.

### Political Risk

In China, the main event that are expected to occur in the near future will be the death of Mr. Deng Xiao-Ping. This is what has been expected for years and so will not cause much shock to the foreign investors.

Besides, the government will not be weakened by Mr. Deng's death, since the need to continue economic growth means the different factions may have little choice

[50] World Bank. The Emerging Asian Bond Market: China. Washington, D.C.: World Bank Publication, June 1995, p.26.

but accommodate each other. The division of labour would likely be the same as it is now. The reformist vice-premier, Zhu Rongji, will continue to oversee economic policy. Jiang Zemin will remain as head of the Communist Party and play a role in foreign affairs. And the conservative premier, Li Peng, will run the government and also involve himself in foreign affairs.[51]

Social stability will remain precariously balanced: economic growth has brought higher standards of living and more choice, but inflation and unemployment are undermining morale. Worried about widening social unrest, Beijing is likely to continue a high-growth/high-inflation strategy.

On the whole, policymaking will probably slow down until after Mr. Deng dies. But the situation should not last for too long as the government has to tackle the problems of inflation, unemployment and the reform of the SOEs. Besides, the direction of economic policymaking will not be changed in the near future.

## Current Account Balance

Apart from 1993, the Current Account Balance of China has been maintaining at a positive level. This has contributed a lot to the foreign reserves of the country which in turn can increase the confidence of the foreign investors in China.

## Foreign Reserves and Short-Term Liabilities

The following table shows the types of bond, grouped by maturities, issued and the foreign reserves of the government between 1986 to 1994.

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[51] The Economic Intelligence Unit. "Waiting and watching, China." Business Asia, 16 January 1996, pp. 3-4.

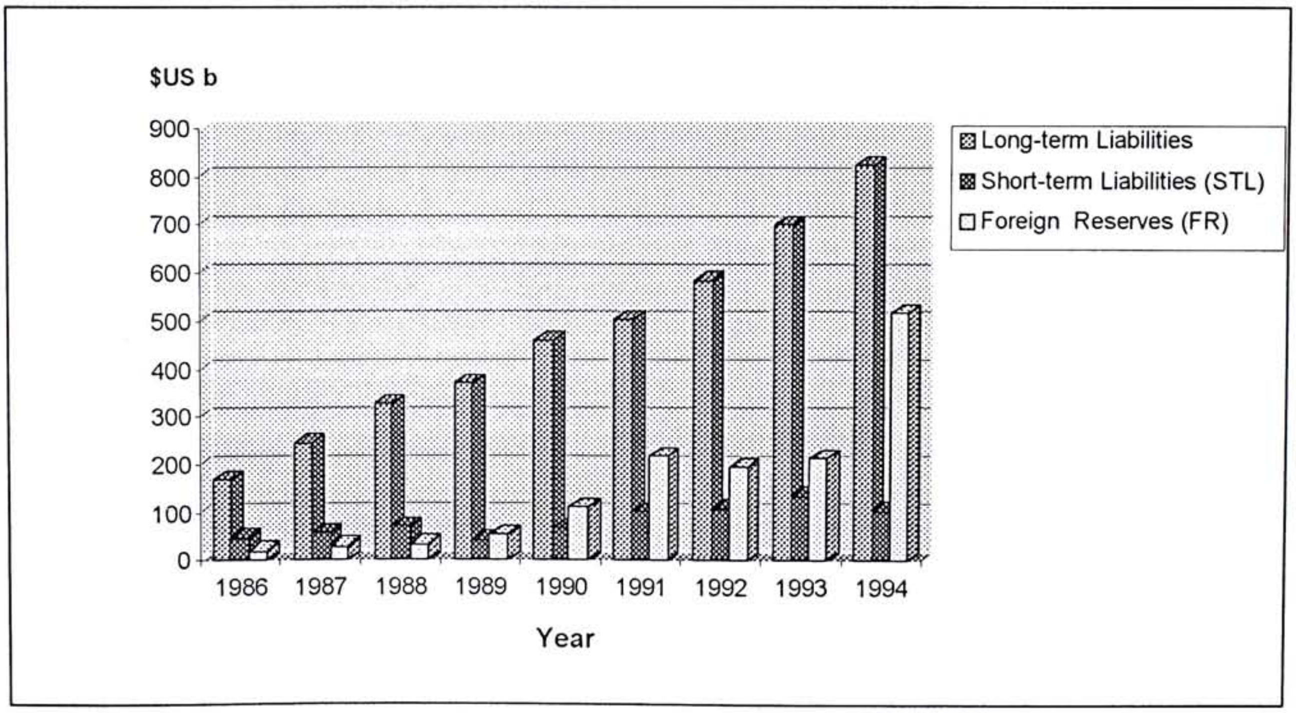
**Table VII-1: Country's Total Foreign Debt**

| Year | Total ($b) | Long-term Liabilities | % of total | Short-term Liabilities (STL) | % of total | Foreign Reserves (FR) | FR - STL |
|---|---|---|---|---|---|---|---|
| 1986 | 214.83 | 167.14 | 77.8 | 47.69 | 22.2 | 20.72 | **-26.97** |
| 1987 | 302.05 | 244.85 | 81.1 | 57.2 | 18.9 | 29.23 | **-27.97** |
| 1988 | 400.03 | 326.96 | 81.7 | 73.07 | 18.3 | 33.72 | **-39.35** |
| 1989 | 412.99 | 370.32 | 89.7 | 42.67 | 10.3 | 55.5 | **12.83** |
| 1990 | 525.45 | 457.79 | 87.1 | 67.66 | 12.9 | 110.93 | **43.27** |
| 1991 | 605.61 | 502.57 | 83.0 | 103.04 | 17.0 | 217.12 | **114.08** |
| 1992 | 693.21 | 584.75 | 84.4 | 108.46 | 15.6 | 194.43 | **85.97** |
| 1993 | 835.73 | 700.27 | 83.8 | 135.46 | 16.2 | 211.99 | **76.53** |
| 1994 | 928.06 | 823.91 | 88.8 | 104.15 | 11.2 | 516.2 | **412.05** |

Source: Statistical Year Book of China, 1995

From the table, we see that the ratio of the government's foreign outstanding debts with longer maturities have been increasing. Besides, since 1989, the country's foreign reserve has been in excess of the foreign short-term liabilities. Both can reduce the risk of default on payment of short-term liabilities perceived by investors. This is illustrated in Figure VII-1.

**Figure VII-1: A Comparison of the Foreign Liabilities and Foreign Reserves**



# Foreign Debt

## Values Scored for Various Risk-Evaluation Indexes

The following table shows the scores of various foreign debt risk-evaluation indexes of the country in the past ten years.

**Table VII-2: Foreign Debt for Risk**

| Year | Debt Service Ratio (20 - 25)* | Liability Ratio (20)* | Foreign Debt Ratio (100)* |
|---|---|---|---|
| 1985 | 2.8 | 5.6 | 53.4 |
| 1986 | 20.3 | 7.8 | 70.0 |
| 1987 | 12.7 | 9.4 | 75.2 |
| 1988 | 6.3 | 10.0 | 84.4 |
| 1989 | 8.0 | 11.5 | 83.1 |
| 1990 | 8.5 | 14.8 | 87.0 |
| 1991 | 8.0 | 15.0 | 87.0 |
| 1992 | 7.3 | 14.1 | 90.7 |
| 1993 | 9.7 | 14.0 | 94.5 |
| 1994 | 9.1 | 17.6 | 77.8 |

Remark: 1. Represented safety level and all unit shown are in %.
2. Debt Service Ratio refers to the repayment of principal and interest on foreign debt to foreign exchange receipts of exports and services.
3. Liability Ratio refers to the ratio of foreign debt to GNP.
4. Foreign Debt Ratio refers to ratio of foreign debt to foreign exchange receipts for exports and services.

Source: Statistical Yearbook of China 1995.

All the indexes show that the foreign debt of the country is **within safety limit**.

## The Ratio of Foreign Debt Issue to the Government's Total Debt Issue.

The following table shows the structure of the government debt financing between 1990 to 1993.

**Table VII-3: Government Debt Finance (0.1b yuan)**

| YEAR | Total Debt Incurred | Govt' Domestic Bonds & Treasury Billls | Foreign Debts | Total Retirement of Debt & Int' Payment | Domestic Bond | Foreign Debt | People's Bank Loans |
|---|---|---|---|---|---|---|---|
| 1990 | **375.45** | 197.24 | 178.21 | **190.4** | 113.75 | 68.21 | 8.44 |
| 1991 | **461.4** | 281.27 | 180.13 | **246.8** | 156.69 | 80.22 | 9.89 |
| 1992 | **669.68** | 460.77 | 208.91 | **438.57** | 342.42 | 80.26 | 15.89 |
| 1993 | **739.22** | 381.32 | 357.9 | **336.22** | 224.3 | 89.22 | 22.7 |

Source: Statistical Year Book of China, 1995.

The foreign debt of the country has been growing. The foreign debt in 1992 is 6 times that of 1979. The continuous economic reform in China resulted in huge foreign capital inflow into the country. Besides, the upgrade of the China's bond rating has increased the attractiveness of the country to the foreign investors.

## Conclusion: The Possibility of Financial Crisis in China

After the analysis, we find nothing similar between the financial and political situations of China and those of Mexico. Thus, we do not think the crisis that occurred in Mexico would happen in China today. However, there are something that are worth to be considered.

First of all, in China, the growth rate of the foreign debt is consistently higher than that of the GDP of the country. If this condition persists, it will eventually increase the default risk perceived by investors which in turn will result in a demand for higher interest rate for further investment into the country. Besides, from 1979 to 1994, there were 22 countries giving loan to the government. The duration of the loan ranged from 15 to 30 years, with a grace period of 7 to 10 years. Therefore, 90's is the peak time for debt repayment.

Second, the China's abundant foreign exchange reserves and healthy debt position rely in great part on two factors: trade surpluses and inward direct investment. The problem is that these inward flows of foreign cash have already peaked and will now decline, while outflows to pay off foreign debt are not. As for trade, the rate of growth in China's exports has been falling steadily for some time, and has been negative so far this year. China must continue to cut import tariffs and reduces export subsidies, and even if it opts to devalue the renminbi to stimulate exports, trade deficits will be the pattern of the future. Moreover, there are already signs of concern. In

March, an major American rating agency, Thomson BankWatch, cut China's sovereign rating from A- to BBB+, citing strong concerns over slowing economic reforms and quickening political tensions. If China fails in its delicate reform policies, its credit will fall and funding costs rise, even as it needs more funds.[52]

Third, the mandatory method of bond placement and the face-value stabilization intervention undermined the purpose behind the 1981 shift from financing the whole deficit through money creation. The bond issue stemmed from the desire to reduce inflation by making fiscal policy independent of monetary policy. With bonds absorbing household and enterprise saving, an increase in government expenditure that widened the budget deficit would not cause a corresponding increase in the (reserve) money supply. However, the mandatory method of bond placement strengthened enterprises' requests for bank loans. Enterprises claimed that the involuntary withdrawals of their working capital to purchase bonds were causing them cash flow problems. So the banking system transformed most of the deficit into money supply growth, with the enterprises acting as intermediates.

The face-value stabilization interventions also resulted in a net increase in the high-power money supply because the local governments would cover their losses with loans from the local banks, which, in turn, received more central bank deposits.

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[52] The Economic Intelligence Unit. "As good as its bond." Business China, 15 April 1996, pp.1-2.

# CHAPTER VIII

# RECOMMENDATIONS FOR FOREIGN INVESTORS

With some understanding of the China's international bond market and its financial situations, we would, from the point of view of foreign investors, try to make some comments on the attractiveness of the China's overseas bonds. Our discussion would only cover a general view rather than base on individual issue. Furthermore, due to the limited information, we will focus only on sovereignty issue rather than issues from corporations and financial institutions.

## Risk of Default

### Credibility

When compared with the other developing countries, China has a better credibility record in the international debt market. This is not without reasons. For example, in the syndicated loans market, China has not performed any loan rescheduling in the past. In addition, China's credibility was also enhanced by the fully repayment in October 1992 of the DM 30 million international bond issued in October 1987. Recently, large volume of syndicated loans were allocated to Chinese borrowers. This reflects good credit perceived by risk-conscious international commercial banks. In contrast, other developing countries like Poland, Argentina, South Africa and Philippines had defaulted on or had rescheduled their foreign debts to commercial banks. Therefore, based on credibility, China should be a good choice for those emerging bond market lovers.

## Macroeconomics Situation

The ability of the borrower to pay back principal and interests is certainly an investor's great concern. The repayment ability of a country is closely related to its macroeconomics situation. Some of the factors have already been discussed in the previous chapter. First of all, the majority of foreign capital inflow in China is FDI. This contributes to a stable economic situation since FDI is less liquid and so capital flight which will hinder economic growth is not likely to occur. Second, since 1993, the current account balance of China has been maintaining at a positive level. The surplus was 1.9% of GDP for 1995, compares favorably with deficits for East Asia averaging 1.5%. This indicates that China has the ability to earn foreign reserve which is needed to make repayment for its foreign debt. Third, since 1989, the amount of foreign reserves of China has exceeded its short-term liabilities. This further proves the repayment ability of China. Fourth, the debt service ratio, liability ratio and foreign debt ratio of China are all below the risky level. Therefore, China is managing its debt in a proper way.

However, there are some issues which would give a negative image on China's economic situation. These are the problems of inflation and the reform of the SOEs. Although the inflation was eased from the peak of 21.7% in 1994 to below 10% in the first quarter of 1996, the situation is not so simple that we can say the problem is solved. In fact, the inflation in China is linked to the problem of SOE reform. In 1995, number of unprofitable SOEs rose to about 40% of the total. Most of the SOEs lack financial resources and triangular debt is an annoying problem. In order to finance the SOEs to ease their capital shortage, the China government needs to loose its credit plan. However, because of the incomplete reform in the banking sector, the amount of credit given does not usually keep alongside with the amount of saving deposits. As a result, money supply would be increased if credit plan is relaxed. In turn, inflation would also be increased. As SOEs are providing most of the employment in the country, China cannot simply let the SOEs go bankruptcy. However, under the present system, helping SOEs through credit would induce inflation. Therefore, SOE reform is an important problem the China government needs to deal with immediately. In reality, the SOE reform cannot be isolated. Successful reforms in other sectors like the banking sector are also required. With a better infrastructure in every system, China can then determine a satisfactory balance point between inflation and unemployment rate. Then, a more stable economic situation would be obtained.

Furthermore, as stated before, the inward flows of foreign cash have begun to decline, while outflows to pay off foreign debt are not. Together with the pessimistic figure in export growth, our view towards China economy is not a pure positive one.

## Credit Rating

Credit rating is a measure of the safety of return of principal and payment of interest. More specifically, credit rating is an assessment of the country's willingness and economic ability to honor its external obligations under the terms of the issue.

China was given a credit rating of above-investment grade by all major rating agencies. The country's sovereign rating was upgraded to A3 by Moody's in September 1993. This was due to the strong potential to attract foreign investment, low external debt burden and the likely 'soft-landing' for successful transition to a more advanced market economy. At the same time, Moody's rated Argentina, Brazil, Mexico, Venezuela, Turkey as well as Hungary below investment grade. Chile, Colombia, India and Indonesia were at investment grade but below that of China.

However, three Asian emerging economies enjoyed higher ratings. They were Korea, Malaysia and Thailand (Table IX-6). After that, a similar upgrading was given to three major financial institutions. They are BOC, CITIC and PCBC (Table IX-7).

However, in April 1995, Moody's cut the long-term debt ratings of PCBC, alongside three other China banks, to Baa1 from A3. PCBC was also given an E-plus financial strength rating by the agency in August. That means the bank is considered weak in terms of financial strength. Nevertheless, among the developing countries, Chinese borrowers are enjoying better ratings about which investors should concern.

## Rate of Return

Compared with other developing countries, the interest rate of China's international bonds is relatively low. In 1994, China enjoyed lower spreads than India or Thailand and also countries outside the region, such as Hungary and Mexico (before its crisis) (Table XIII-1). However, the small dragon Korea was better than China in this aspect. The favourable terms enjoyed by China until recently reflect in large part its good macroeconomics performance. After the 1994 Mexico crisis, developing countries as a whole suffered some decline in their terms. In the case of China, there were some deterioration in secondary-market prices on bonds.[53] Anyway, to comply with the risk-return theory, China's overseas bonds are perceived as safer and so the return is lower than those of other developing countries.

[53] Since China's overseas bond issues are not traded on the exchanges, but are traded largely over the counter between major internaional investors, the measurement of the true deterioration in these terms is difficult.

**Table VIII-1: Average Spread on Floating Rate Bond Issues[54] (Basis Points Above LIBOR)**

| Countries | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|
| China | 50 | 55 | 54 | 56 |
| Hungary | n.a. | n.a. | n.a. | 150 |
| India | n.a. | n.a. | n.a. | 218 |
| Korea | 36 | 56 | 50 | 35 |
| Mexico | n.a. | 250 | 313 | 139 |
| Thailand | n.a. | 43 | 43 | 89 |

Source: World Bank, IEC.

## Conclusion

On the whole, the credibility of China is better than those of the other developing countries. As China requires large amount of foreign capital for its numerous infrastructure projects, it would try its best to avoid debt repudiation which would be very harmful to its trade relationship and future ability to obtain external financing.

The current ability of debt repayment of China is pretty good as indicated by several financial ratios. However, there is still a long way to go before a stable economic situation can be reached. Several important issues like the SOE reform and inflation need the China government to put into more efforts. The amount of FDI and exports in the future are not very optimistic. Therefore, in the long run, the situation is not very clear. As the maturity of China's international bonds became longer and longer (Figure VI-3), foreign investors should be aware of the increased risk of their Chinese's bond-holding.

On the political side, the situation is quite stable. It is thought that power has been successfully transferred to the third generation leaders in China. The smooth transfer of power is critical to the economic stability. On the other hand, China made a

[54] An Adequate set of comparable data for each year and country, in terms of currency of issue and maturity does not exist, and the table is therefore based on a specific bond type, the floating rate bond, for medium and long bonds.

great advancement in the international relationship. On 25 April 1996, Russian President Boris Yeltsin and Chinese President Jiang Zemin signed agreements to cooperate on energy and space exploration. China's external economic and political relations are important considerations in its foreign bonds' credibility evaluation. Good relationship with other countries is a positive indication of China's future economic development and its credibility.

In conclusion, China's international bonds should be a good choice for short-term investment, although they offer a lower coupon rate. For investors interested in long-term investment, China's bonds should also be considered. Those investors should place their eye-sight in future business with China rather than the bond's intrinsic value. Even if the investment is risky and not so profitable, it may be worthwhile in terms of building long-term relationships with China. By the way, foreign investors should evaluate their own position before making their investments, such as risk-bearing capacity and investment horizon. Their decision ought to base on the whole investment portfolio rather than individual investment.

Although we solely discuss the government bonds here, it is also useful for the evaluation of non-government overseas bonds. Apart from the microeconomics environment, non-government bonds are also susceptible to the effect of macroeconomics environment of the country. For example, changes in government policy and the whole economy will affect the operating performance of the issuers. In addition, country's creditworthiness will confine the credit rating of individual issuers. That is what we call the sovereign ceiling effect.

# CHAPTER IX

# APPENDIX

**Table IX-1: Treasury Bond Issues**

| Issue Year | Maturity | Coupon Rate (%) | Issue size (rmb b) | Comparable Deposit Rate (%) |
|---|---|---|---|---|
| **1981** | 10-yr | 8 | 4.9 | 6.84 |
| **1982** | 10-yr | 8 | 4.4 | 7.92 |
| **1983** | 10-yr | 8 | 4.2 | 7.92 |
| **1984** | 10-yr | 8 | 4.3 | 7.92 |
| **1985** | 5-yr | 9 | 6.1 | 8.28 |
| **1986** | 5-yr | 10 | 6.3 | 9.36 |
| **1987** | 5-yr | 10 | 6.3 | 9.36 |
| **1988** | 3-yr | 10 | 9.2 | 8.28 |
| **1989** | 3-yr | 14 | 5.6 | 13.14 |
| **1990** | 3-yr | 14 | 9.3 | 11.88 |
| **1991** | 3-yr | 10 | 19.9 | 8.28 |
| **1992 (1)** | 5-yr | 10.5 | 13.3 | 9 |
| **1992 (2)** | 3-yr | 9.5 | 26.2 | 8.28 |
| **1993 (1)** | 3-yr | 13.96 | 20 | 12.24 |
| **1993 (2)** | 5-yr | 15.86 | 10 | 13.86 |
| **1994 (1)** | 6-mo | 9.8 | 5 | 9 |
| **1994 (2)** | 1-yr | 11.98 | 10 | 10.98 |
| **1994 (3)** | 2-yr | 13 | 27 | 11.7 |
| **1994 (4)** | 3-yr | 13.96 | 50 | 12.24 |

Source: Zhang, Yi-Chen, and Yu, Da. "China's Emerging Securities Market." The Columbia Journal of World Business, Summer 1994, p.116.

**Table IX-2: Trading Volume of Securities (Y million)**

| | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|---|---|---|---|---|---|---|
| **Treasury Bonds** | | 2,420.85 | 2,126.00 | 11,593.53 | 37,017.28 | 108,257.42 | 83,056.49 |
| Treasury Bills | | 2,383.09 | 2,094.17 | 10,488.64 | 33,954.79 | 105,023.65 | 83,017.37 |
| Fiscal Bonds | | | | | | | |
| State Construction Bonds | | | 14.84 | 4.66 | | | |
| Key State Construction Bonds | | 37.76 | 16.99 | 9.75 | 29.49 | | |
| Special Government Bonds | | | | | | | |
| Indexed Bonds | | | | 1,090.48 | 3,033.00 | 3,233.77 | 39.12 |
| **National Investment Bonds** | | | | | | 5,160.55 | 1,468.97 |
| **National Investment Corporation Bonds** | | | 8.61 | 25.67 | 216.24 | 3,159.45 | 543.24 |
| Key Enterprise Bonds | | | 2.62 | | | | |
| Capital Construction Bonds | | | 5.99 | 25.67 | 216.24 | | |
| **Financial Institution Bonds** | 12.00 | 69.58 | 46.11 | 46.22 | 781.47 | 3,501.92 | 2,224.77 |
| **Local Enterprise Bonds** | 91.63 | 115.87 | 79.09 | 105.58 | 2,463.28 | 12,822.93 | 23,450.92 |
| **Short-Term Enterprise Negotiable Certificates** | 0.00 | 0.00 | 6.48 | 34.31 | 1,014.29 | 3,080.21 | 3,002.09 |
| **Subtotal debt securities**[a] | 103.63 | 2,606.30 | 2,274.90 | 11,830.98 | 41,708.80 | 135,982.48 | 113,746.48 |
| **Enterprise Stock**[b] | 8.00 | 9.22 | 23.15 | 1,812.37 | 8,674.00 | 136,248.00 | 733,406.00 |
| **Jumbo CDs** | 0.00 | 12.85 | 12.16 | 41.59 | 102.27 | 278.61 | 307.42 |
| **Total all securities** | 111.63 | 2,628.37 | 2,310.21 | 13,684.94 | 50,485.07 | 272,509.09 | 847,459.90 |

Source: State Council Securities Committee, circular dated August 1994.

[a] Bond trading is estimated on a gross basis.

[b] Enterprise stock trading includes officially recognized centres only.

**Table IX-3: Securities Trading on the Shanghai Exchange in 1994 (Turnover, Y million)**

| | Equities | | Treasury Bonds | | | | |
|---|---|---|---|---|---|---|---|
| | **A Shares** | **B Shares** | **Spot** | **Repurchase** | **Futures** | **Funds** | **Total** |
| **Jan-94** | 29,436 | 1,867 | 994 | 92 | 2,528 | 62.5 | 34,979 |
| **Feb-94** | 7,389 | 353 | 1,461 | 3 | 360 | 17.7 | 9,584 |
| **Mar-94** | 57,517 | 727 | 2,551 | 1 | 2,781 | 246.9 | 63,824 |
| **Apr-94** | 30,397 | 579 | 2,661 | 36 | 11,305 | 111.7 | 45,089 |
| **May-94** | 21,567 | 985 | 3,464 | 312 | 20,828 | 58.3 | 47,214 |
| **Jun-94** | 9,726 | 690 | 2,937 | 856 | 64,644 | 33.8 | 78,886 |
| **Jul-94** | 7,204 | 425 | 3,136 | 562 | 101,027 | 54 | 112,409 |
| **Aug-94** | 147,007 | 1,448 | 6,376 | 426 | 121,141 | 3,349.6 | 279,747 |
| **Sep-94** | 149,589 | 1,136 | 4,512 | 384 | 123,285 | 5,256.8 | 284,163 |
| **Oct-94** | 54,942 | 927 | 3,499 | 656 | 56,620 | 1,695.9 | 118,340 |
| **Nov-94** | 28,405 | 1,049 | 6,592 | 1,156 | 513,127 | 773.9 | 551,103 |
| **Dec-94** | 19,495 | 577 | 7,545 | 1,833 | 888,425 | 469.5 | 918,344 |
| **Jan-95** | 4,579 | 446 | 5,173 | 1,567 | 1,436,064 | 89 | 1,489,129 |

Source: Shanghai Securities Exchange: Monthly Market Statistics.

**Table IX-4: Monthly Transaction Volume in the Interbank Market (Y billion)**

| Year | Month | State Banks[a] | Percent of Total | Other Banks[bc] | Percent of Total | Non-bank[cd] Financial Institutions | Percent of Total | All Financial Institutions |
|---|---|---|---|---|---|---|---|---|
| **1990** | **Total** | **3,120.96** | | | | | | |
| **1991** | **Total** | **5,144.48** | | | | | | |
| 1992 | January | 549.82 | | | | | | |
| | February | 542.60 | | | | | | |
| | March | 550.28 | | | | | | |
| | April | 583.40 | | | | | | |
| | May | 623.59 | | | | | | |
| | June | 669.83 | | | | | | |
| | July | 699.88 | | | | | | |
| | August | 728.40 | | | | | | |
| | September | 715.82 | | | | | | |
| | October | 715.62 | | | | | | |
| | November | 1,550.65 | | | | | | |
| | December | 809.34 | | | | | | |
| | **Total** | **8,739.21** | | | | | | |
| 1993 | January | 803.14 | | 7.50 | | 50.73 | | 861.36 |
| | February | 779.35 | | 7.39 | | 53.44 | | 840.18 |
| | March | 775.61 | | 7.26 | | 56.81 | | 839.67 |
| | April | 753.32 | | 7.36 | | 61.44 | | 822.12 |
| | May | 731.16 | | 7.23 | | 58.99 | | 797.38 |
| | June | 677.43 | | 7.61 | | 82.37 | | 767.40 |
| | July | 580.45 | | 5.97 | | 53.57 | | 639.99 |
| | August | 529.59 | | 4.04 | | 43.74 | | 577.37 |
| | September | 602.08 | | 4.35 | | 43.75 | | 650.18 |
| | October | 719.84 | | 4.20 | | 42.64 | | 766.68 |
| | November | 896.84 | | 4.05 | | 43.87 | | 944.75 |
| | December | 979.71 | | 4.96 | | 42.47 | | 1,027.14 |
| | **Total** | **8,828.50** | **92.6** | **71.92** | **0.80** | **633.79** | **6.60** | **9,534.21** |
| 1994 | January | 138.65 | | 5.30 | | 110.05 | | 253.99 |
| | February | 135.41 | | 4.87 | | 111.93 | | 252.20 |
| | March | 135.84 | | 5.09 | | 116.45 | | 257.38 |
| | April | 138.78 | | 4.90 | | 123.31 | | 266.99 |
| | May | 135.30 | | 5.13 | | 127.31 | | 267.75 |
| | June | 125.65 | | 6.51 | | 134.47 | | 266.62 |
| | July | 126.91 | | 6.69 | | 133.99 | | 267.59 |
| | August | 128.91 | | 6.74 | | 134.16 | | 269.81 |
| | September | 135.72 | | 7.88 | | 136.81 | | 280.41 |
| | October | 133.45 | | 7.00 | | 136.44 | | 276.89 |
| | **Total[e]** | **1,334.62** | **50.2** | **60.11** | **2.26** | **1,264.90** | **47.6** | **2,659.63** |

Source: SEEC, 1995.

[a] State Banks include ICBC, ABC, BOC, PBOC, BOCOM and CITIC Industrial Bank.

[b] Other Banks include non-state-owned commercial banks and regional banks.

[c] Data on Other Banks and Non-bank Financial Institutions available from 1993.

[d] Non-bank Financial Institutions include rural and urban co-operative credit agencies, trust and investment companies and accounting firms.

[e] January to October only.

**Table IX-5: Assets of Financial Institutions Engaged in the Interbank Market (Y billion)**

| Year | Quarter Assets | State Bank | Percent of Total | Other Bank Assets | Percent of Total | Non-bank Financial Institutions Assets | Percent of Total | Total[a] |
|---|---|---|---|---|---|---|---|---|
| 1990 | Q1 | 1,626.62 | | | | 368.08 | | 1,994.71 |
| | Q2 | 1,697.94 | | | | 396.66 | | 2,094.60 |
| | Q3 | 1,754.13 | | | | 410.18 | | 2,164.30 |
| | Q4 | 1,998.20 | | | | 159.65 | | 2,157.85 |
| | **Total** | **7,076.90** | | | | **1,334.57** | | **8,411.46** |
| 1991 | Q1 | 2,028.58 | | | | 533.80 | | 2,562.38 |
| | Q2 | 2,093.53 | | | | 530.75 | | 2,624.28 |
| | Q3 | 2,229.06 | | | | 540.17 | | 2,769.23 |
| | Q4 | 2,479.10 | | | | 865.97 | | 3,345.07 |
| | **Total** | **8,830.27** | | | | **2,470.70** | | **11,300.97** |
| 1992 | Q1 | 2,494.51 | | | | 630.11 | | 3,124.62 |
| | Q2 | 2,657.51 | | | | 698.16 | | 3,355.67 |
| | Q3 | 2,750.21 | | | | 763.08 | | 3,513.29 |
| | Q4 | 3,000.86 | | | | 848.83 | | 3,849.68 |
| | **Total** | **10,903.09** | | | | **2,940.17** | | **13,843.26** |
| 1993 | Q1 | 3,009.85 | | 45.84 | | 960.69 | | 4,016.38 |
| | Q2 | 2,975.65 | | 50.95 | | 1,021.11 | | 4,047.71 |
| | Q3 | 3,044.44 | | 52.52 | | 1,023.64 | | 4,120.60 |
| | Q4 | 3,498.02 | | 66.40 | | 1,127.23 | | 4,691.65 |
| | **Total** | **12,527.97** | **74.23** | **215.71** | **1.28** | **4,132.67** | **24.49** | **16,876.34** |
| 1994 | Q1 | 3,495.72 | | 71.32 | | 1,070.05 | | 4,637.09 |
| | Q2 | 3,741.94 | | 119.42 | | 1,321.96 | | 5,183.32 |
| | Q3 | 4,307.06 | | 143.32 | | 1,422.85 | | 5,873.24 |
| | **Total[b]** | **11,544.72** | 73.56 | 334.06 | **2.13** | **3,814.86** | **24.31** | **15,693.65** |

Source: SEEC, 1995.

[a] Totals for 1990-1992 include only State Bank Assets and Non-bank Financial Institutions Assets.

[b] January-September only.

**Table IX-6: Sovereign Rating of Selected Developing Countries (1994)**

| Countries | Moody's | Standard and Poors |
|---|---|---|
| **Investment Grade** | | |
| Chile | Baa2 | BBB+ (1) |
| China | A3 | BBB (2) |
| Colombia | Ba1 | BBB- (2) |
| Cyprus | n.a. | AA- (1) |
| Czech Republic | Baa2 | BBB+ (2) |
| Greece | Baa3 | BBB- (1) |
| Indonesia | Baa3 | BBB- (2) |
| Korea, Rep. of | A1 | A+ (3) |
| Malaysia | A2 | A (2) |
| Malta | A2 | A (1) |
| Portugal | A1 | AA- (1) |
| South Africa | Baa3 | BB(2) |
| Thailand | A2 | A- (1) |
| **Below Investment Grade** | | |
| Argentina | B1 | BB- (2) |
| Brazil | B2 | n.a. |
| Hungary | Ba1 | BB+ (1) |
| India | Ba2 | BB+ (1) |
| Mexico | Ba2 | BB+ (2) |
| Philippines | Ba3 | BB- (1) |
| Slovakia | n.a. | BB- (1) |
| Trinidad & Tobago | Ba2 | n.a. |
| Turkey | Ba3 | B+ (1) |
| Uruguay | Ba1 | BB+ (1) |
| Venezuela | Ba2 | B+ (3) |

Source: World Bank

Notes: (1) Stable outlook
(2) Positive outlook
(3) Negative outlook

**Table IX-7: Credit Ratings of Chinese Borrowers**

| Announcement date | Issuer Full Name | Listing | Standard and Poors | Moody's |
|---|---|---|---|---|
| 10-Apr-89 | BOC | TO | | A3 |
| 26-Jun-91 | BOC | TO | | Baa1 |
| 29-Oct-91 | CITIC | UQ | | Baa1 |
| 26-Mar-92 | CITIC | LX | | Baa1 |
| 28-Jul-93 | CITIC | UQ | BBB | Baa1 |
| 09-Sep-93 | PRC | LN | A3 | |
| 15-Nov-93 | GITIC | UQ | BBB | Baa1 |
| 02-Feb-94 | PRC | LX, SI, H | BBB | A3 |
| 10-Mar-94 | BOC | UQ | BBB | |
| 10-Mar-94 | BOC | UQ | BBB | |
| 19-Oct-94 | CITIC | NY | BBB | |
| 17-Nov-94 | BOCOM | | BBB | |

Source: World Bank

Notes: TO: Tokyo
LX: Luxembourg
LN: London
UQ: Unquoted
NY: New York
SI: Singapore
H: Hong Kong

# CHAPTER X

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